

C12
202:A59
1993

NATURAL HERITAGE PROGRAM LIST OF THE RARE ANIMAL SPECIES OF NORTH CAROLINA



Compiled By
Harry E. LeGrand, Jr., Zoologist
With Contributions by Stephen P. Hall

North Carolina Natural Heritage Program
Division of Parks and Recreation
N. C. Department of Environment, Health, and Natural Resources 1993

MAR 21 1994

NATURAL HERITAGE PROGRAM LIST
OF THE RARE ANIMALS OF NORTH CAROLINA*
1993 EditionN.C. STATE LIBRARY
RALEIGH

compiled by Harry E. LeGrand Jr., Zoologist
with contributions by Stephen P. Hall, Invertebrate Zoologist
North Carolina Natural Heritage Program
Division of Parks and Recreation
Department of Environment, Health, and Natural Resources

NATURAL HERITAGE PROGRAM LIST OF THE RARE ANIMALS OF NORTH CAROLINA . . .	1
MAMMALS	10
BIRDS	11
REPTILES	13
AMPHIBIANS	14
FRESHWATER FISHES	15
MARINE AND ESTUARINE FISHES	17
MOLLUSKS	18
FRESHWATER BIVALVES	18
FRESHWATER GASTROPODS	20
TERRESTRIAL GASTROPODS	20
MARINE BIVALVES	21
MARINE GASTROPODS	21
ARACHNIDS	22
CRUSTACEANS	22
MILLIPEDES	23
INSECTS	24
MAYFLIES	24
CADDISFLIES	24
DRAGONFLIES	24
FLIES	25
SCORPIONFLIES	25
MOTHS	25
BUTTERFLIES	26
BEETLES	29
ANTS	31
ANNELIDS	31
SUPPLEMENT TO THE NATURAL HERITAGE PROGRAM LIST OF THE RARE ANIMALS OF NORTH CAROLINA	32
NORTH CAROLINA ANIMAL WATCH LIST	33
MAMMALS	35
BIRDS	35
REPTILES	36
AMPHIBIANS	37
FRESHWATER FISHES	37
MOLLUSKS -- FRESHWATER BIVALVES	38
CRUSTACEANS	38
INSECTS -- BUTTERFLIES	39
INSECTS -- BEETLES	40
POTENTIAL NEW TO NORTH CAROLINA ANIMALS	41

*This list is dynamic and is revised frequently as further data become available. New species are added to the list, and others are dropped from the list for various reasons. The list will be revised periodically, generally once every year or two. If you are using a copy of this list which is more than a year old (check the edition date at the top of the first page), it might be invalid and you should request a new version. Further information on these species may be obtained by contacting the North Carolina Natural Heritage Program, Division of Parks and Recreation, Department of Environment, Health, and Natural Resources, P.O. Box 27687, Raleigh, NC 27611-7687 or the Nongame and Endangered Wildlife Program, North Carolina Wildlife Resources Commission, 512 North Salisbury Street, Raleigh, NC 27611.



Digitized by the Internet Archive
in 2015

NATURAL HERITAGE PROGRAM LIST OF THE RARE ANIMALS OF NORTH CAROLINA

The attached list of animals represents those species of vertebrates and invertebrates for which the N.C. Natural Heritage Program is collecting data -- in files, on computer, and on topographic maps. This is not strictly a list of protected animals; in fact, the majority of these species receive no formal protection whatsoever. Rather, it is a list of species that are endangered, threatened, or otherwise occur in small or unknown numbers in the state. The primary functions of the list are its use: 1) in determining priorities of inventory and protection for these animals, including the proposed listing of species for federal or state protection; 2) in determining priorities for protection of natural areas that contain such listed animals; and 3) in environmental assessments to "flag" rare species and their locations that might be negatively affected by proposed actions.

This overall list is based primarily on two sources. The majority of the vertebrates on the list are those species currently listed for state protection by the Wildlife Resources Commission (WRC). Scientific councils for mammals, birds, reptiles and amphibians, freshwater fishes, and mollusks have already submitted their lists of State Endangered (E), Threatened (T), and Special Concern (SC) species to the WRC. All of these species are included on this list, with the corresponding status listed in the "N.C. Status" column. In addition, the Natural Heritage Program is tracking other rare vertebrates and mollusks not given a formal state designation. These species are listed as "Significantly Rare," "Vulnerable," or of "Undetermined" status.

Many species of invertebrates (other than mollusks) are those listed in the Symposium on Endangered and Threatened Plants and Animals of North Carolina, published in 1977. The butterfly, moth, and dragonfly lists are prepared by the N.C. Natural Heritage Program, in consultation with other biologists in the state. Only those animals with legislatively mandated federal or state protection are given an Endangered, Threatened, or Special Concern status in this Natural Heritage Program animal list; all others are given a status of Significantly Rare, Vulnerable, or Undetermined.

As of February 1993, E, T, and SC species of mammals, birds, reptiles, amphibians, freshwater fishes, and freshwater and terrestrial mollusks are protected by state law, under the jurisdiction of the WRC. A list of crustaceans proposed for state protection has been compiled but has not yet been submitted to the WRC. These species (crustaceans) have been assigned a SR (Significantly Rare) status in this Natural Heritage Program publication because the crustacean list has not been adopted for protection. (NOTE: The list of rare marine and estuarine fishes was presented in 1988 by the N.C. State Museum of Natural Sciences; however, state protection does not cover marine and estuarine animals, and these species are not under the jurisdiction of the WRC. Except for the federally Endangered Shortnose Sturgeon, all other marine and estuarine fishes were listed in 1988 as "Vulnerable, Category 2". That status has been changed to "Significantly Rare" in this animal list, with the exception of the Atlantic Sturgeon. Because this species also occurs in fresh waters, it has been listed by the WRC as a Special Concern species.)

LIST FORMAT

Species are grouped by major taxa. The vertebrates are arranged by class, beginning with the most advanced phylogenetically (mammals). Within a given taxa, species are listed alphabetically by scientific name. The following information is presented for each species on the list. "Status" is a word or phrase that indicates the degree of protection (if any), based on rarity, of a species; "rank" is a numerical scale of the rarity of a species, regardless of legal protection.

Scientific Name.

Common Name. For most groups, these names are not standardized.

North Carolina Status. Endangered, Threatened, and Special Concern species of Mammals, Birds, Reptiles, Amphibians, Freshwater Fishes, and Freshwater and Terrestrial Mollusks have legal protection status in North Carolina (Wildlife Resources Commission). In addition to the above categories, the Natural Heritage Program maintains computer and map files on Significantly Rare, Vulnerable, and Undetermined status species, as well as species considered Extirpated. Paper files only are maintained for some of the above species; these species are indicated by the phrase "not tracking."

STATUS CODE	STATUS	DEFINITION
E	Endangered	"Any native or once-native species of wild animal whose continued existence as a viable component of the State's fauna is determined by the Wildlife Resources Commission to be in jeopardy or any species of wild animal determined to be an 'endangered species' pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987).
T	Threatened	"Any native or once-native species of wild animal which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, or one that is designated as a threatened species pursuant to the Endangered Species Act." (Article 25 of Chapter 113 of the General Statutes; 1987).
SC	Special Concern	"Any species of wild animal native or once-native to North Carolina which is determined by the Wildlife Resources Commission to require monitoring but which may be taken under regulations adopted under the provisions of this Article." (Article 25 of Chapter 113 of the General Statutes; 1987).

SR	Significantly Rare	Any species which has not been listed by the N.C. Wildlife Resources Commission as an Endangered, Threatened, or Special Concern species, but which exists in the state in small numbers and has been determined by the N.C. Natural Heritage Program to need monitoring. (This is a N.C. Natural Heritage Program designation.) Significantly Rare species include "peripheral" species, whereby North Carolina lies at the periphery of the species' range (such as Purple Gallinule). The designation also includes marine and estuarine fishes identified as "Vulnerable" by the N.C. State Museum of Biological Sciences (Ross et al., 1988, <u>Endangered, Threatened, and Rare Fauna of North Carolina. Part II. A Re-evaluation of the Marine and Estuarine Fishes</u>). Also included in the Significantly Rare designation are species formerly listed by the Natural Heritage Program (1991) as "Undetermined". "Undetermined" species are those that are secretive or are otherwise poorly known in North Carolina, which the Natural Heritage Program believes are rare and should be monitored.
EX	Extirpated	A species which is no longer believed to occur in the state.
W	Watch List	Any other species believed to be of conservation concern in the state because of scarcity, declining populations, threats to populations, or inadequacy of information to assess its rarity (see Page 33 for a more complete discussion).
*	---	Species is a game animal, and therefore (by law) cannot be listed for State protection as E, T, or SC.
#	---	Species proposed for Endangered status, but not adopted by the Wildlife Resources Commission; species is protected from taking.
@	---	Species proposed for Special Concern status, but not adopted by the Wildlife Resources Commission; species is protected from taking.

United States Status is designated by the U.S. Fish and Wildlife Service. Federally listed Endangered and Threatened species are protected under the provisions of the Endangered Species Act of 1973, as amended through the 100th Congress. Unless otherwise noted, definitions are taken from the the Federal Register, Vol. 56, No. 225, November 21, 1991 (50 CFR Part 17).

STATUS CODE	STATUS	DEFINITION
E	Endangered	A taxon "which is in danger of extinction throughout all or a significant portion of its range" (Endangered Species Act, Section 3).
T	Threatened	A taxon "which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (Endangered Species Act, Section 3).
C1	Candidate 1	"Taxa for which the [Fish and Wildlife] Service has on file enough substantial information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species. Proposed rules have not yet been issued because this action is precluded at present by other listing activity. [Such proposed rules] are anticipated, however, and the Service encourages other Federal agencies to give consideration to such taxa in environmental planning."
C2	Candidate 2	"Taxa for which information now in the possession of the [Fish and Wildlife] Service indicates that proposing to list as endangered or threatened is possibly appropriate, but for which conclusive data on biological vulnerability and threat are not currently available to support proposed rules.... Further biological research and field study usually will be necessary to ascertain the status of taxa in this category....The Service hopes that this notice will encourage necessary research on vulnerability, taxonomy, and/or threats for these taxa."
C1*, C2*	---	Candidate taxa, but lacking known occurrences
3A	Candidate 3A	"Taxa for which the [Fish and Wildlife] Service has persuasive evidence of extinction. If rediscovered, such taxa might acquire high priority for listing."
3B	Candidate 3B	"Names that, on the basis of current taxonomic understanding..., do not represent distinct entities meeting the Act's definition of 'species'; it also includes vertebrate populations that do not meet this definition."
3C	Candidate 3C	"Taxa that have proven to be more abundant or widespread than previously believed and/or those that are not subject to any identifiable threat. If further research or changes in habitat indicate a significant decline in any of these taxa, they may be reevaluated for possible inclusion in categories 1 or 2."
P_	Proposed	Species currently proposed, as either endangered or threatened. Species formally proposed receive some protection by law.

North Carolina Rank. North Carolina ranks are based on the Natural Heritage Program Network of measuring rarity and threat status. This system is widely used by other agencies and organizations, as the best available scientific and objective assessment of a species' rarity at the state level.

RANK	NUMBER OF EXTANT POPULATIONS	DESCRIPTION
S1	1-5	Critically imperiled in North Carolina because of extreme rarity or because of some factor(s) making it especially vulnerable to extirpation from North Carolina.
S2	6-20	Imperiled in North Carolina because of rarity or because of some factor(s) making it very vulnerable to extirpation from North Carolina.
S3	21-100	Rare or uncommon in North Carolina.
S4	100-1000	Apparently secure in North Carolina, with many occurrences.
S5	1000+	Demonstrably secure in North Carolina and essentially ineradicable under present conditions.
SA	1-?	Accidental or casual; one to several records for North Carolina, but the state is outside the normal range of the species.
SH	0?	Of historical occurrence in North Carolina, perhaps not having been verified in the past 20 years, and suspected to be still extant.
SR	--	Reported from North Carolina, but without persuasive documentation which would provide a basis for either accepting or rejecting the report.
SX	0	Apparently extirpated from North Carolina.
SU	--	Possibly in peril in North Carolina but status uncertain; need more information.
S?	--	Unranked, or rank uncertain.
_B	1-?	Rank of the breeding population in the state. Used for migratory species only.
_N	1-?	Rank of the non-breeding population in the state. Used for migratory species only.
Z	1-?	Population is not of significant conservation concern. For example, the status "SZN" indicates that the population in the non-breeding seasons (generally in migration or in winter) is transitory, without any regular locales of occurrence whereby the species can be protected. Where a number is listed with the "B" or "N" modifier, there are definable locales of occurrence that can be identified for protection.

Global Rank. Similar to North Carolina ranks, global ranks are assigned by a consensus of scientific experts, the individual natural heritage programs, and the Natural Heritage Network. Global ranks apply to the status of a species throughout its range, and are based on data on the species' status rangewide. This system is widely used by other agencies and organizations, as the best available scientific and objective assessment of a species' rarity throughout its range.

RANK	NUMBER OF EXTANT POPULATIONS	DESCRIPTION
G1	1-5	Critically imperiled globally because of extreme rarity or because of some factor(s) making it especially vulnerable to extinction.
G2	6-20	Imperiled globally because of rarity or because of some factor(s) making it very vulnerable to extinction throughout its range.
G3	21-100	Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single physiographic region) or because of other factors making it vulnerable to extinction throughout its range.
G4	100-1000	Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
G5	1000+	Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
GH	0?	Of historical occurrence throughout its range, i.e., formerly part of the established biota, with the expectation that it may be rediscovered.
GX	0	Believed to be extinct throughout its range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered.
GU	--	Possibly in peril range-wide, but status uncertain; more information is needed.
G?	--	Unranked, or rank uncertain.
G_Q	--	Questionable taxonomic assignment.
T_	--	The rank of a subspecies or variety. As an example, G4T1 would apply to a subspecies of a species with an overall rank of G4, but the subspecies warranting a rank of G1.

Physiographic Province. The provinces in which the animal is known to occur are indicated. This should not be regarded as the only province(s) of the state in which the species could occur; our knowledge of the fauna of North Carolina, especially the invertebrates, is still very imperfect. The provinces are abbreviated as follows:

- | | | |
|---|---------------|--|
| M | Mountains | All parts of North Carolina west of the foot of the Blue Ridge Escarpment. |
| P | Piedmont | All parts of North Carolina east of the foot of the Blue Ridge Escarpment and west of the Fall Line, including outlying "foothill" ranges, such as the Brushy, Uwharrie, and Sauratown mountains. |
| C | Coastal Plain | All parts of North Carolina east of the Fall Line (including the Sandhills), but excluding the portions associated with tidal water (ocean, sounds, barrier islands, and mainland brackish or salt marshes). |
| T | Tidewater | That part of the state associated with tidal water, such as the ocean and barrier islands, sounds, estuaries, and mainland brackish or salt marshes. |

Habitat. The known, or the most typical, habitats are described briefly; as with provinces, these should not be regarded as the only possible habitats of the species in the state.

STATUS OF ANIMAL TAXA ON NHP RARE ANIMAL LIST¹
(as of December 31, 1992)

Group	N.C. Status					U.S. Status ²		
	E	T	SC	SR	Other ³	E	T	C2
Mammals	7	2	11	6	0	7	1	7
Birds	9	2	14	26	1	8	1	7
Reptiles	3	4	8	4	0	3	3	4
Amphibians	1	2	14	1	2	0	0	4
Freshwater Fishes	8	11	28	11	0	1	2	8
Saltwater Fishes	(1) ⁴	0	(1)	0	5	(1)	0	0
Mollusks	15	22	34	18	2	3	1	22
Crustaceans	0	0	0	17	0	0	0	11
Dragonflies	0	0	0	31	0	0	0	8
Butterflies and Moths	0	0	0	49	14	0	0	10
Other Invertebrate Groups	1	0	0	75	21	1	0	11
Totals	44	43	109	238	45	23	8	92

¹ For names and definitions of statuses, see pages 2-4. Numbers in the table indicate number of taxa, generally species, for each group and status. Because many taxa have both an N.C. and a U.S. status, totals cannot be added across a complete line.

² Space on the table does not allow for all possible U.S. Status categories. Excluded are taxa with statuses of "PE", "PT", "C1", "3A", "3B", and "3C".

³ The "Other" column includes taxa with statuses of "Vulnerable", "Undetermined", or "Extirpated".

⁴ Taxa in parentheses are also included in the Freshwater Fishes totals and are not included in the Totals at the bottom of the table.

NUMBER OF ANIMAL SPECIES IN NORTH CAROLINA⁵
(as of December 31, 1992)

Group	Total # Species ⁶	# Species -- State Protected (E,T,SC)	# Species -- Rare List (E,T,SC, SR,Other)	% on State Prot. List	% on Rare List
Mammals	120	19	25	16	21
Birds ⁷	200 (420)	25	52	12.	26
Reptiles	70	15	19	21	27
Amphibians	80	17	20	21	25
Freshwater Fishes	245	47	58	19	24
Freshwater Bivalves	65	34	44	52	68
Freshwater & Terrestrial Gastropods	250	36	38	14	15
Crayfish	35	0	5	0	14
Dragonflies	135	0	27	0	20
Butterflies	160	0	45	0	28
Macro-moths ⁸	1000+	0	19	0	2

⁵ This table includes only selected animal groups, particularly those with species totals that are reasonably known.

⁶ The species totals are approximate numbers, generally rounded to the nearest five.

⁷ The number in parentheses is the total number reported in the state; the smaller number is the estimated number of breeding species, which is used in the calculations of the percentages.

⁸ The "macro-moths" are a relatively small percentage of the entire moth fauna and are those families containing species of medium to large body size.

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name	Common Name	Status		Rank	
Province: Habitat		N.C.	U.S.	N.C.	Global
MAMMALS					
Canis rufus CM: swamps, pocosins, extensive forests	Red Wolf	E	E	S1	G1 ⁹
Condylura cristata parva MC: moist meadows, bogs, swamps, bottomlands [Coastal Plain population is SC; mountain population not of concern]	Star-nosed Mole	SC	3C	S4	G5
Felis concolor cougar MPC: extensive forests, remote areas	Eastern Cougar (Panther, Mountain Lion)	E	E	SH	G4TH
Glaucomys sabrinus coloratus M: high elevation forests, mainly spruce-fir	Carolina Northern Flying Squirrel	E	E	S1	G5T1
Microsorex (see Sorex)					
Microtus chrotorrhinus carolinensis M: rocky areas at high elevations, forests or fields	Southern Rock Vole	SC	C2	S2	G5T3
Mustela nivalis M: fields and forests, mostly at high elevations	Least Weasel	SR		S2	G5
Myotis austroriparius CP: roosts in buildings, hollow trees; forages near water	Southeastern Bat	SC	C2	S2	G4
Myotis grisescens M: roosts in caves; forages mainly over open water	Gray Bat	E	E	SA	G2
Myotis leibii leibii M: roosts in hollow trees (warmer months), in caves and mines (winter)	Eastern Small-footed Bat	SC	C2	SUB,S1N	G3T?
Myotis septentrionalis (= M. keenii) MP: roosts in hollow trees and buildings (warmer months), in caves and mines (winter)	Northern Long-eared Bat	SC		SUB,S2N	G4
Myotis sodalis M: roosts in hollow trees or under loose bark (warmer months), in caves (winter)	Indiana Bat	E	E	SUB,S2N	G2
Neotoma floridana haemitoria; Neotoma floridana magister M: rocky places in deciduous or mixed forests (haemitoria = G5T5; magister = G5T4Q)	Eastern Woodrat (haemitoria = Southern Appalachian Woodrat; magister = Allegheny Woodrat)	SC	C2	S2	G5
Neotoma floridana floridana [Coastal Plain race] C: forests, mainly in moist areas	Eastern Woodrat	T		S1	G5T?
Peromyscus polionotus P: sandy, fallow fields near South Carolina line	Oldfield Mouse	SR		S1	G5
Plecotus rafinesquii MC: roosts in old buildings, caves, and mines, usually near water	Rafinesque's Big-eared Bat	SC	C2	S3	G4
Plecotus townsendii virginianus M: roosts in caves (and rarely in mines), especially in limestone areas	Virginia Big-eared Bat	E	E	S1	G5T2
Sciurus niger CPM: open forests, mainly longleaf pine/scrub oak	Fox Squirrel	SR*		S3	G5
Sorex dispar M: high elevation forests with talus or rocky slopes	Long-tailed Shrew	SC	3C	S2	G5
Sorex hoyi winnemana (= Microsorex) MC: montane deciduous forests; old fields and clearcuts in northeastern Coastal Plain	Southern Pygmy Shrew	SC	3C	S2?	G5T5
Sorex longirostris fisheri C: woodlands and brushy fields, especially where damp, in Dismal Swamp vicinity	Dismal Swamp Southeastern Shrew	T	T	S2	G5T1T3
Sorex palustris punctulatus M: stream banks in montane forests	Southern Water Shrew	SC	C2	S1	G5T3
Sylvilagus aquaticus M: wet woods and floodplains in southern mountains	Swamp Rabbit	SR*		SH	G5
Sylvilagus transitionalis M: dense cover of montane woods and thickets	New England Cottontail	SR*	C2	S3	G4

⁹ Re-introduction, at Alligator River NWR and Great Smoky Mountains NP, NC

Natural Heritage Program List of the Rare Animals of North Carolina

11

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Tadarida brasiliensis</i> C: roosts in buildings and other man-made structures	Brazilian Free-tailed Bat	SC		SUB,S2N	G5
<i>Trichechus manatus</i> T: warm waters of estuaries and river mouths	West Indian Manatee	E	E	S1N	G2?
<i>Ursus americanus</i> MC: extensive montane forests; pocosins, swamps	Black Bear	SR*		S3	G5
BIRDS					
<i>Accipiter cooperii</i> MPC: forests and woodlands (for nesting) [breeding evidence only]	Cooper's Hawk	SC		S2B,S3N	G4
<i>Accipiter gentilis</i> M: extensive, remote forests, mainly at high elevations (for nesting) [breeding evidence only]	Northern Goshawk	SR	C2	SUB,S2N	G4
<i>Accipiter striatus</i> MP: forests and woodlands (for nesting) [breeding evidence only]	Sharp-shinned Hawk	SR		S2B,S4N	G5
<i>Aegolius acadicus</i> M: spruce-fir forests or mixed hardwood/ spruce forests (for nesting) [breeding season only]	Northern Saw-whet Owl	SC		S2B,S2N	G5
<i>Aimophila aestivalis</i> CP: open longleaf pine forests, old fields [breeding season only]	Bachman's Sparrow	SC	C2	S3B,S2N	G3
<i>Ammodramus henslowii</i> C: clearcut pocosins and other damp weedy fields [breeding season only]	Henslow's Sparrow	SR	C2	S2B,S1N	G4
<i>Anhinga anhinga</i> C: wooded lakes or ponds, or open swamps (for nesting) [breeding evidence only]	Anhinga	SR		S2B,S2N	G5
<i>Aquila chrysaetos</i> MC: extensive open country; formerly nested on cliffs [regular wintering or summering sites]	Golden Eagle	SR		SXB?,S1N	G4
<i>Botaurus lentiginosus</i> CT: fresh or brackish marshes [breeding season only]	American Bittern	SR		S1B,S3N	G4
<i>Campephilus principalis</i> C: swamps with mature timber [not tracking; presumed extirpated in USA]	Ivory-billed Woodpecker	E	E	SX	G1
<i>Catharus guttatus</i> M: spruce-fir forests (for nesting) [breeding season only]	Hermit Thrush	SR		S1B,S5N	G5
<i>Charadrius melodus</i> T: ocean beaches and island-end flats [breeding evidence only]	Piping Plover	T	T	S2B,S2N	G3
<i>Chondestes grammacus</i> C: barren, sandy fields with scattered saplings in the sandhills region [breeding season only]	Lark Sparrow	SR		S1B,S2N	G5
<i>Circus cyaneus</i> T: extensive brackish marshes (for nesting) [breeding evidence only]	Northern Harrier	SR		S1B,S4N	G5
<i>Coccyzus erythrophthalmus</i> M: deciduous forests, mainly at higher elevations [breeding season and habitat only]	Black-billed Cuckoo	SR		S2B,S2N	G5
<i>Columbina passerina</i> T: dunes, sandy fields, margins of maritime woods and thickets [breeding season only]	Common Ground-Dove	SR		S1B,S1N	G5
<i>Contopus borealis</i> M: montane conifer forests (mainly spruce-fir) with openings or dead trees [breeding season only]	Olive-sided Flycatcher	SC		S1B,S2N	G5

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Coragyps atratus</i> MPC: forested areas for nesting; forests or open country for foraging [not tracking]	Black Vulture	SC		S3	G5
<i>Corvus corax</i> MP: cliffs for nesting; forests or fields (mainly at high elevations) for foraging [breeding evidence only]	Common Raven	SR		S3	G5
<i>Coturnicops noveboracensis</i> TC: brackish or fresh marshes, wet fields [winter season only]	Yellow Rail	SR		S2N	G4
<i>Dendroica cerulea</i> MC: mature hardwood forests; steep slopes and coves in mountains, natural levees in Coastal Plain [breeding season only]	Cerulean Warbler	SR	C2	S3B, S2N	G5
<i>Dendroica kirtlandii</i> PC: [not tracking; a casual or accidental migrant]	Kirtland's Warbler	E	E	SA	G1
<i>Dendroica magnolia</i> M: spruce-fir forests, especially in immature stands [breeding season only]	Magnolia Warbler	SR		S1B, S2N	G5
<i>Egretta caerulea</i> T: forests or thickets on maritime islands [breeding sites only]	Little Blue Heron	SC		S3B, S3N	G5
<i>Egretta thula</i> T: forests or thickets on maritime islands [breeding sites only]	Snowy Egret	SC		S3B, S3N	G5
<i>Egretta tricolor</i> T: forests or thickets on maritime islands [breeding sites only]	Tricolored Heron	SC		S3B, S3N	G5
<i>Empidonax alnorum</i> M: high elevation shrub/sapling thickets [breeding season only]	Alder Flycatcher	SR		S2B, S2N	G5
<i>Falco peregrinus</i> MT: cliffs (for nesting); coastal ponds and mudflats (for foraging in winter) [nesting evidence; regular wintering sites]	Peregrine Falcon	E	E	S1B, S2N	G3
<i>Haliaeetus leucocephalus</i> PCT: mature forests near large bodies of water (for nesting); lakes and sounds [nesting sites; regular non-breeding sites]	Bald Eagle	E	E	S1B, S2N	G3
<i>Himantopus mexicanus</i> T: fresh or brackish ponds and impoundments [breeding sites only]	Black-necked Stilt	SR		S2B	G5
<i>Ictinia mississippiensis</i> C: mature, extensive bottomland forests, mainly in Roanoke River floodplain [regular summer locations only]	Mississippi Kite	SR		S1B	G5
<i>Lanius ludovicianus</i> CPM: fields and pastures [not tracking]	Loggerhead Shrike	SC	C2	S2B, S3N	G4
<i>Laterallus jamaicensis</i> TCP: brackish marshes, rarely fresh marshes [breeding season only]	Black Rail	SR	C2	S3B, S2N	G4?
<i>Mycteria americana</i> T: fresh or brackish ponds (for foraging) [regular non-breeding sites]	Wood Stork	E	E	S1N	G5
<i>Parus atricapillus</i> M: high elevation forests, mainly spruce-fir [breeding season only]	Black-capped Chickadee	SC		S3	G5
<i>Passerculus sandwichensis</i> M: grassy fields and pastures [breeding season only]	Savannah Sparrow	SR		S1B, S5N	G5
<i>Pelecanus occidentalis</i> T: maritime islands [breeding sites only]	Brown Pelican	SC		S3B, S4N	G5

Natural Heritage Program List of the Rare Animals of North Carolina

13

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
Phalacrocorax auritus CP: lakes with scattered trees for nesting [breeding sites only]	Double-crested Cormorant	SR		S1B,S5N	G5
Picoides borealis CP: mature open pine forests, mainly in longleaf pine [breeding evidence only]	Red-cockaded Woodpecker	E	E	S2	G2
Plegadis falcinellus T: forests or thickets on maritime islands [breeding sites only]	Glossy Ibis	SC		S2B,S1N	G5
Porphyryla martinica C: freshwater ponds with floating vegetation [breeding sites only]	Purple Gallinule	SR		S1B	G5
Regulus satrapa M: spruce-fir forests; hardwood forests mixed with spruce or hemlock [not tracking]	Golden-crowned Kinglet	SC		S3B,S5N	G5
Riparia riparia P: high, vertical banks for nesting [breeding sites only]	Bank Swallow	SR		S1B,S2N	G5
Rynchops niger T: sand flats on maritime islands [breeding sites only]	Black Skimmer	SC		S3B,S3N	G5
Sphyrapicus varius M: mature, open hardwoods with scattered dead trees [breeding season only]	Yellow-bellied Sapsucker	SR		S2B,S5N	G5
Sterna caspia T: sand flats on maritime islands [breeding sites only]	Caspian Tern	SR		S1B,S2N	G5
Sterna dougallii T: sand flats on maritime islands [breeding evidence only]	Roseate Tern	E	E	SAB,S1N	G3
Sterna nilotica T: sand flats on maritime islands [breeding sites only]	Gull-billed Tern	T		S3B,S2N	G5
Thryomanes bewickii altus M: woodland borders or openings, farmlands or brushy fields, at high elevations [breeding season only]	Appalachian Bewick's Wren	E	C2	SHB,S2N	G5T?
Vermivora bachmanii P: [not tracking; accidental visitor]	Bachman's Warbler	E	E	SA	G1
Vermivora pinus M: low elevation brushy fields and thickets [breeding season only]	Blue-winged Warbler	SR		S2B,S2N	G5
Vireo gilvus M: groves of hardwoods along rivers and streams [breeding season only]	Warbling Vireo	SR		S2B,S2N	G5

REPTILES

Alligator mississippiensis CT: fresh to slightly brackish lakes, ponds, rivers, and marshes	American Alligator	T	T(S/A) ¹⁰	S3	G5
Apalone spinifera spinifera M: large streams in the French Broad system	Eastern Spiny Softshell	SC		S1	G5T5
Caretta caretta T: nests on beaches; forages in ocean and sounds	Loggerhead	T	T	S2B,S2N	G3
Chelonia mydas T: nests on beaches; forages in ocean and sounds	Green Turtle	T	T	S1B,S2N	G3
Clemmys muhlenbergii MP: bogs, wet pastures, wet thickets	Bog Turtle	T	C2	S2	G3

¹⁰ T(S/A) = Threatened due to Similarity of Appearance

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Crotalus adamanteus</i> C: pine flatwoods, savannas, pine-oak sandhills	Eastern Diamondback Rattlesnake	SR#		S1	G5
<i>Dermochelys coriacea</i> T: oceans, rarely in sounds	Leatherback	E	E	SZN	G3
<i>Eretmochelys imbricata</i> T: oceans, very rarely in sounds	Hawksbill	E	E	SZN	G3
<i>Heterodon simus</i> C: sandy woods, particularly pine-oak sandhills	Southern Hognose Snake	SR	C2	S3	G4G5
<i>Lampropeltis getula sticticeps</i> T: maritime forests, thickets, and grasslands on the Outer Banks	Outer Banks Kingsnake	SC		S2	G5T2Q
<i>Lepidochelys kempii</i> T: ocean and sounds	Atlantic Ridley	E	E	SZN	G1
<i>Malaclemys terrapin</i> T: salt or brackish marshes; estuaries [not tracking]	Diamondback Terrapin	SC	C2	S3	G5
<i>Micrurus fulvius</i> C: pine-oak sandhills, sandy flatwoods, maritime forests	Eastern Coral Snake	SR#		S1	G5
<i>Nerodia sipedon williamengelsi</i> T: salt or brackish marshes	Carolina Salt Marsh Snake	SC		S2	G5T2
<i>Opheodrys vernalis</i> M: fields and grassy meadows	Smooth Green Snake	SC		SH	G5
<i>Ophisaurus mimicus</i> C: pine flatwoods, savannas, pine/oak sandhills	Mimic Glass Lizard	SC		S2	G3
<i>Pituophis melanoleucus melanoleucus</i> CM: dry and sandy woods, mainly in pine/oak sandhills	Northern Pine Snake	SC	C2	S3	G5T?
<i>Sistrurus miliarius</i> CP: pine flatwoods, pine/oak sandhills, other pine/oak forests	Pigmy Rattlesnake	SR@		S3	G5
<i>Sternotherus minor</i> [S. m. peltifer] M: streams and rivers in Mississippi drainage	Loggerhead Musk Turtle [Stripeneck Musk Turtle]	SC		S1	G5

AMPHIBIANS

<i>Ambystoma talpoideum</i> MP: breeds in fish-free semipermanent woodland ponds; forages in adjacent woodlands	Mole Salamander	SC		S2	G5
<i>Ambystoma tigrinum</i> C: breeds in fish-free semipermanent ponds; forages in adjacent woods, usually sandy pinewoods	Tiger Salamander	T		S2	G5
<i>Aneides aeneus</i> M: damp, shaded crevices of cliffs or rock outcrops in deciduous forests (southern mountains)	Green Salamander	E	C2	S1	G3G4
<i>Cryptobranchus alleganiensis</i> M: large and clear fast-flowing streams	Hellbender	SC	C2	S3	G4
<i>Desmognathus santeetlah</i> M: stream headwaters and seepage areas; southwestern mountains	Santeetlah Dusky Salamander	SR		S2S3	G3Q
<i>Eurycea junaluska</i> M: forests near seeps and streams in the Cheoah River system	Junaluska Salamander	SC	C2	S2	G2Q
<i>Eurycea longicauda longicauda</i> M: moist woods and floodplains	Longtail Salamander	SC		S2	G5T5
<i>Eurycea quadridigitata</i> (part) C: pocosins, bay forests, flatwoods, savannas	Dwarf Salamander (silver-bellied morph)	SC		S2	G5T?Q
<i>Hemidactylium scutatum</i> MPC: pools, bogs, and other wetlands in hardwood forests	Four-toed Salamander	SC		S3	G5
<i>Hyla andersonii</i> C: pocosins, bay forests, boggy areas	Pine Barrens Treefrog	SR	3C	S3	G4
<i>Necturus lewisi</i> PC: rivers and large streams in Neuse and Tar drainages (endemic to North Carolina)	Neuse River Waterdog	SC	3C	S3	G3
<i>Necturus maculosus</i>	Mudpuppy	SC		S1	G5

Natural Heritage Program List of the Rare Animals of North Carolina

15

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
M: rivers and large streams (French Broad drainage)					
Plethodon aureolus	Tellico Salamander	SR		S2	G2G3Q
M: forests in the Unicoi Mountains					
Plethodon dorsalis	Zigzag Salamander	SC		S1	G5
M: moist areas of talus slopes or rock outcrops in hardwood forests					
Plethodon longicrus	Crevice Salamander	SC		S1	G1Q
M: cool rock crevices or talus slopes in Hickorynut Gorge area (endemic to North Carolina)					
Plethodon wehrlei	Wehrle's Salamander	T		S1	G5
P: upland forests (on a monadnock in North Carolina)					
Plethodon welleri	Weller's Salamander	SC		S2	G4
M: high elevation forests in northern mountains, mainly in spruce-fir					
Pseudacris brachyphona	Mountain Chorus Frog	SC		SH	G5
M: forests near temporary pools or ponds, in extreme southwestern mountains					
Rana capito capito	Carolina Gopher Frog	SC	C2	S2	G4T?
C: breeds in temporary fish-free pools; forages in sandy woods, especially pine-oak sandhills					
Rana heckscheri	River Frog	SC		S1	G5
C: river floodplains, such as pools or borrow pit ponds					

FRESHWATER FISHES

Acipenser brevirostrum (see listing under Marine and Estuarine Fishes)					
Acipenser fulvescens	Lake Sturgeon	SC	C2	SRSX	G3
M: large rivers of Tennessee drainages					
Acipenser oxyrhynchus (see listing under Marine and Estuarine Fishes)					
Ambloplites cavifrons	Roanoke Bass	SR*		S3	G3
PC: streams in Neuse and Tar systems					
Aplodinotus grunniens	Freshwater Drum	T		S1	G5
M: French Broad River					
Carpiodes carpio	River Carpsucker	SC		S1	G5
M: French Broad River					
Carpiodes velifer	Highfin Carpsucker	SC		S2	G4G5
PC: Catawba, Pee Dee, and Cape Fear rivers					
Clinostomus funduloides subsp.	Little Tennessee River Rosyside Dace	SC		S2	G5T?
M: Little Tennessee drainage					
Cottus caroliniae	Banded Sculpin	T		S1	G5
M: French Broad River system					
Cyprinella monacha	Spotfin Chub	T	T	S1	G2
M: Little Tennessee River; formerly in French Broad drainage					
Cyprinella zanema	Santee Chub	SR		S3	G3?
PC: Catawba, Broad, Cape Fear, and Lumber drainages					
Elassoma boehlkei	Carolina Pygmy Sunfish	T	C2	S1S2	G1G2
C: streams and canals in Waccamaw drainage					
Etheostoma acuticeps	Sharphead Darter	T	3C	S1	G3G4
M: streams in Nolichucky system (Toe and Cane rivers)					
Etheostoma collis	Carolina Darter	SC		S3	G3
P: streams in the Piedmont					
Etheostoma inscriptum	Turquoise Darter	SC		S1	G4
M: streams of Savannah drainage					
Etheostoma jessiae	Blueside Darter	SC		S1	G4Q
M: streams in Mills River system					
Etheostoma kanawhae	Kanawha Darter	SR		S3	G2
M: New drainage					
Etheostoma maculatum (= E. sanguifluum) (see Etheostoma vulneratum)					

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Etheostoma mariae</i> C: streams of Lumber drainage, mainly in the sandhills; perhaps in adjacent Pee Dee drainage	Pinewoods Darter	SC	3C	S3	G3
<i>Etheostoma perlongum</i> C: Lake Waccamaw (endemic to North Carolina)	Waccamaw Darter	T	3B	S1	G10
<i>Etheostoma podostemone</i> P: large streams in Dan River system	Riverweed Darter	SC		S2	G3
<i>Etheostoma simotermum</i> M: streams of French Broad drainage (formerly)	Tennessee Snubnose Darter	SC		SH	G5
<i>Etheostoma vulneratum</i> M: streams of Little Tennessee system; perhaps extirpated from French Broad system	Wounded Darter	SC		S2	G2
<i>Exoglossum laurae</i> M: New drainage	Tonguetied Minnow	SR		S2	G4
<i>Exoglossum maxillingua</i> P: streams of Dan River system	Cutlips Minnow	E		S1	G5
<i>Fundulus waccamensis</i> C: large natural lakes (Lakes Waccamaw and Phelps) (endemic to North Carolina)	Waccamaw Killifish	SC	G2	S1	G1
<i>Heterandria formosa</i> C: streams and lakes near Wilmington	Least Killifish	SC		S1	G5
<i>Hiodon tergisus</i> M: French Broad River	Mooneye	SC		S1	G5
<i>Hybopsis monacha</i> (see <i>Cyprinella monacha</i>)					
<i>Hybopsis rubrifrons</i> (see <i>Notropis rubescens</i>)					
<i>Hybopsis zanema</i> (see <i>Cyprinella zanema</i>)					
<i>Hybopsis</i> , new species [Cape Fear Chub] (merged with <i>Cyprinella zanema</i>)					
<i>Hypentelium roanokense</i> P: Dan drainage	Roanoke Hog Sucker	SR		S3	G3?
<i>Ictiobus bubalus</i> MP: French Broad River; Piedmont reservoirs	Smallmouth Buffalo	SR		S2	G5
<i>Lampetra aepyptera</i> CP: Tar and Neuse drainages	Least Brook Lamprey	SC		S2	G5
<i>Lampetra appendix</i> M: French Broad drainage	American Brook Lamprey	T		S1	G5
<i>Lepomis megalotis</i> M: French Broad drainage	Longear Sunfish	SR*		SH	G5
<i>Lucania goodei</i> C: stream in Wilmington area	Bluefin Killifish	SC		S1	G5
<i>Luxilus chrysocephalus</i> M: Cane River system	Striped Shiner	T		S1	G5
<i>Menidia extensa</i> C: Lake Waccamaw (endemic to North Carolina)	Waccamaw Silverside	T	T	S1	G1
<i>Micropterus coosae</i> M: Savannah drainage	Redeye Bass	SR		S1	G5
<i>Moxostoma ariommum</i> P: Dan drainage	Bigeye Jumprock	SC		S2	G2
<i>Moxostoma carinatum</i> (undescribed form) P: Pee Dee River	River Redhorse	SC		S1	G4T1
<i>Moxostoma hamiltoni</i> P: Dan drainage	Rustyside Sucker	E	3C	S1	G2
<i>Notropis bifrenatus</i> C: stream near lower Neuse River	Bridle Shiner	SC		SH	G5
<i>Notropis chrysocephalus</i> (see <i>Luxilus</i>)					
<i>Notropis lutipinnis</i> MP: Savannah, Little Tennessee, and Broad drainages [only the Savannah and Little Tennessee drainages are listed as SC]	Yellowfin Shiner	SC		S3	G4
<i>Notropis mekistocholas</i> P: Cape Fear drainage (endemic to North Carolina)	Cape Fear Shiner	E	E	S1	G1

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Notropis rubescens</i> M: Savannah drainage	Rosyface Chub	T		S1	G4
<i>Noturus eleutherus</i> M: French Broad drainage	Mountain Madtom	SC		SH	G5
<i>Noturus flavus</i> M: Cane River	Stonecat	E		S1	G5
<i>Noturus furiosus</i> CP: Tar and Neuse drainages (endemic to North Carolina)	Carolina Madtom [Neuse population] [Tar population]	SC SR	3C	S3 S2	G3 G3T2Q
<i>Noturus gilberti</i> P: Dan drainage	Orangefin Madtom	E	C2	S1	G2
<i>Noturus</i> , new species C: Cape Fear, Waccamaw, and Lumber drainages	Broadtail Madtom	SC		S2	G2
<i>Percina aurantiaca</i> M: Tennessee drainages	Tangerine Darter	SR		S3	G3G4
<i>Percina burtoni</i> M: South Toe River; formerly in French Broad drainage	Blotchside Darter	E		S1	G2
<i>Percina caprodes</i> M: Tennessee drainages	Logperch	T		S2	G5
<i>Percina macrocephala</i> M: French Broad River; probably extirpated	Longhead Darter	SC	C2	SH	G3
<i>Percina oxyrhynchus</i> M: New drainage	Sharpnose Darter	SC		S1	G4
<i>Percina sciera</i> M: French Broad drainage	Dusky Darter	E		S1	G5
<i>Percina squamata</i> M: Tennessee drainages	Olive Darter	SC	C2	S3	G3
<i>Phenacobius teretulus</i> M: New drainage	Kanawha Minnow	SC	C2	S3	G3
<i>Polyodon spathula</i> M: French Broad River	Paddlefish	E	C2	S1	G4
<i>Semotilus lumbee</i> C: streams in the sandhills	Sandhills Chub	SC	3C	S3	G3
<i>Stizostedion canadense</i> M: French Broad and Hiwassee rivers	Sauger	SR*		S2	G5

MARINE AND ESTUARINE FISHES

<i>Acipenser brevirostrum</i> TC: brackish water of large rivers and estuaries; spawns in freshwater areas	Shortnose Sturgeon	E	E	S1	G3
<i>Acipenser oxyrhynchus</i> TC: coastal waters, estuaries, large rivers	Atlantic Sturgeon	SC		S3	G3
<i>Eleotris pisonis</i> T: fresh to brackish ponds, river mouths, and estuaries	Spinycheek Sleeper	SR		S2	G5
<i>Evorthodus lyricus</i> T: shallow tidal water, especially pools in salt marshes	Lyre Goby	SR		S2	GU
<i>Gobionellus stigmaticus</i> T: shallow salt or brackish water	Marked Goby	SR		S2	G7
<i>Hypsoblennius ionthas</i> T: shallow bays, estuaries, tidal creeks	Freckled Blenny	SR		S2	GU
<i>Microphis brachyurus</i> T: warm fresh to brackish water	Opossum Pipefish	SR		S1	G5
<i>Oostethus brachyurus</i> (see <i>Microphis</i>)					

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name	Common Name	Status		Rank	
Province: Habitat		N.C.	U.S.	N.C.	Global
MOLLUSKS -- FRESHWATER BIVALVES ¹¹					
Alasmidonta heterodon PC: Tar and Neuse drainages, mainly near Fall Line	Dwarf Wedgemussel	E	E	S1	G1
Alasmidonta raveneliana M: Tennessee drainages; Little Tennessee and Nolichucky rivers at present; formerly in Cane and North Toe rivers	Appalachian Elktoe	E	C2	S1	G1
Alasmidonta robusta P: Long Creek in Mecklenburg County (endemic to North Carolina; now believed extinct)	Carolina Elktoe	EX	3A	SX	GH
Alasmidonta undulata PC: most river systems in Piedmont and Coastal Plain	Triangle Floater	T		S2	G4
Alasmidonta varicosa PM: many Piedmont systems and along Blue Ridge escarpment of Catawba River system	Brook Floater	T	C2	S2	G3
Alasmidonta viridis M: Little Tennessee River	Slippershell Mussel	E		S1	G4
Alasmidonta, new species? (sp. 1) P: upper Yadkin River system (Davie County)	a bivalve	SR		SU	G1Q
Anodonta couperiana C: Bladen County; formerly in Greenfield Lake	Barrel Floater	E		S1	G3G4
Anodonta implicata C: Chowan, Meherrin, and lower Roanoke rivers	Alewife Floater	SC		S2	G5 (G4)
Elliptio dilatata M: Little Tennessee and New rivers	Spike	SC		S2	G5 (G3)
Elliptio folliculata C: lower Coastal Plain, mainly in Lake Waccamaw	Pod Lance	SC		S2	G3
Elliptio judithae [probably conspecific with E. roanokensis] CP: Neuse River; possibly Tar River (endemic to North Carolina)	Neuse Slabshell	E	C2	S1	G1Q
Elliptio lanceolata PC: Tar and Neuse systems, mainly near the Fall Line	Yellow Lance	T	C2	S2	G4 (G3)
Elliptio marsupiobesa [probably conspecific with E. icterina] C: Cape Fear River in Cumberland and Bladen counties (endemic to North Carolina)	Cape Fear Spike	T	C2	SU	G3Q
Elliptio perlatus C: Cape Fear River, Great Coharie Creek	a bivalve	SR		SU	G1Q
Elliptio roanokensis PC: Neuse and Tar river systems	Roanoke Slabshell	T		S1	G2Q
Elliptio steinstansana PC: Tar River drainage, primarily Swift Creek (endemic to North Carolina)	Tar Spiny mussel	E	E	S1	G1
Elliptio waccamawensis C: Lake Waccamaw and vicinity (endemic to North Carolina; possibly in adjacent South Carolina)	Waccamaw Spike	T	C2	S1	G1
Elliptio, new species? (sp. 3) C: Black River system (Great Coharie Creek)	a bivalve	SR		SU	G1Q
Elliptio, new species? (sp. 4) P: Deep River system (Chatham/Lee county line)	a bivalve	SR		SU	G1Q
Elliptio, new species? (sp. 5) C: Lake Waccamaw (endemic to North Carolina)	Waccamaw Lance Pearly mussel	SR	C2	S1S3	G1G3Q
Fusconaia barnesiana M: Little Tennessee River	Tennessee Pigtoe	E		S1	G3

¹¹Global ranks in parentheses are those suggested by the N.C. Scientific Council on Freshwater and Terrestrial Mollusks and are not The Nature Conservancy's assigned ranks.

Natural Heritage Program List of the Rare Animals of North Carolina

19

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Fusconaia masoni</i> CP: most Atlantic drainages, in lower Piedmont and upper Coastal Plain; also in Black River in lower Coastal Plain	Atlantic Pigtoe	T	C2	S1	G2
<i>Lampsilis cariosa</i> PC: a number of river systems; mainly near the Fall Line	Yellow Lampmussel	T	C2	S1	G4
<i>Lampsilis conspicuus</i> P: Neuse, Flat, and upper Pee Dee rivers	a bivalve	SR		SU	G1G2Q
<i>Lampsilis crocata</i> C: Lake Waccamaw and vicinity; possibly Orton Pond	Waccamaw Lampmussel	SC		S2	G1Q (GU)
<i>Lampsilis fasciola</i> M: French Broad, Pigeon, and Little Tennessee rivers; currently known only in last river	Wavy-rayed Lampmussel	SC		S2	G4
<i>Lampsilis fullerhati</i> C: Lake Waccamaw and vicinity (endemic to North Carolina and adjacent South Carolina)	Waccamaw Fatmucket	T	C2	S1	G1
<i>Lampsilis ochracea</i> CP: a number of systems, primarily in the Coastal Plain; abundant in Lake Waccamaw	Tidewater Mucket	SC		S2	G4
<i>Lampsilis radiata</i> CP: a number of river systems	Eastern Lampmussel	SC		S2	G5 (G4)
<i>Lampsilis</i> , new species? (sp. 1) P: Deep River	a bivalve	SR		SU	G1G2Q
<i>Lasmigona decorata</i> P: Catawba and Pee Dee drainages in Union and Mecklenburg counties (endemic to this area and adjacent South Carolina)	Carolina Heelsplitter	E	PE	S1	G1
<i>Lasmigona holstonia</i> M: Watauga River; formerly in Valley Creek in Cherokee County	Tennessee Heelsplitter	E	C2	S1	G2
<i>Lasmigona subviridis</i> CPM: Tar, Neuse, and Cape Fear systems downstate; New and Watauga systems in mountains	Green Floater	E	C2	S1	G4 (G3)
<i>Leptodea ochracea</i> (see <i>Lampsilis</i>)					
<i>Ligumia nasuta</i> C: Chowan, Roanoke, and Pamlico systems	Eastern Pondmussel	SC		S2	G4 (G3)
<i>Pegias fabula</i> M: Little Tennessee River; formerly in Valley River in Cherokee County	Little-wing Pearlymussel	E	E	S1	G1
<i>Strophitus undulatus</i> P: Tar, Neuse, Cape Fear, and Pee Dee systems, perhaps other systems in Piedmont	Squawfoot	T		S2	G5 (G4)
<i>Toxolasma pullus</i> PC: a number of Atlantic drainages, most numerous in University Lake near Chapel Hill	Savannah Lilliput	T	C2	S2	G3
<i>Tritogonia verrucosa</i> M: New River near the Virginia border	Pistolgrip	E		S1	G4
<i>Villosa constricta</i> PC: most Atlantic drainages, mainly in lower Piedmont	Notched Rainbow	SR		S3?	G4
<i>Villosa delumbis</i> PC: most Atlantic drainages	Eastern Creekshell	SR		S3?	G3G4
<i>Villosa nebulosa</i> M: French Broad, Hiwassee, and Little Tennessee rivers; currently only known in the state from the last river	Alabama Rainbow	SC		S2	G3
<i>Villosa vanuxemensis</i> M: French Broad and Hiwassee systems	Mountain Creekshell	T		S1	G4
<i>Villosa vauhaniana</i> P: Pee Dee system (endemic to North Carolina and adjacent South Carolina)	Carolina Creekshell	SC		S2	G3

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name	Common Name	Status		Rank	
Province: Habitat		N.C.	U.S.	N.C.	Global
MOLLUSKS -- FRESHWATER GASTROPODS					
Amnicola sp. C: Lake Waccamaw and adjacent Big Creek (endemic to North Carolina)	Waccamaw Snail	SC		S1	G? (G1Q)
Cincinnatia sp. C: Lake Waccamaw and adjacent Big Creek (endemic to North Carolina)	Waccamaw Siltsnail	SC		S1	G? (G1Q)
Ferrissia hendersoni CP: scattered locales in Coastal Plain and Piedmont, but mainly on margins of Carolina bay lakes (apparently endemic to North Carolina)	Blackwater Ancyloid	SC		S1	G? (G1)
Goniobasis interrupta M: Hiwassee River and tributaries	Knotty Elimia	E	C2	S1	G? (G1)
Helisoma eucosmum C: Greenfield Lake (endemic to North Carolina; believed to be extinct)	Greenfield Ramshorn Snail	EX	3A	SX	GH
Leptoxis dilatata M: New River in Ashe County	Seep Mudalia	T		S1	G? (G3)
Leptoxis virgata M?: reported from Hiwassee River, possibly in error	Smooth Mudalia	SR	C2	SU	G? (G2)
Planorbella magnifica C: Orton Pond and pond on Sand Hill Creek; formerly Greenfield Lake (endemic to North Carolina)	Magnificent Rams-horn	E	C2	S1	G1
MOLLUSKS -- TERRESTRIAL GASTROPODS					
Catinella avara C: shoreline of Lake Waccamaw	Suboval Ambersnail	T		S1	G5
Discus bryanti M: Watauga to Madison counties	Saw-tooth Disc	SC		S2	G? (G3)
Glyphyalinia clingmani M: Black Mountains of Yancey County (endemic to North Carolina)	Fragile Glyph	E	C2	S1	G? (G1)
Glyphyalinia junaluska M: southwestern mountains	Dark Glyph	SC		S2	G? (G3)
Glyphyalinia pentadelphia M: southwestern mountains	Pink Glyph	SC		S2	G? (G3)
Glyphyalinia vanattai M: Avery, Mitchell, and Yancey counties	Honey Glyph	SC		S2	G? (G2)
Haplotrema kendeighi M: southwestern mountains	Blue-footed Lancetooth	SC		S2	G? (G2)
Helicodiscus bonamicus M: Nantahala Gorge vicinity (endemic to this area)	Spiral Coil	SC		S2	G? (G2)
Helicodiscus fimbriatus M: extreme southwestern corner of the state, in Cherokee and Graham counties	Fringed Coil	SC		S2	G? (G3)
Mesodon chilhowensis M: southern half of the mountains	Queen Crater	SC		S2	G? (G2)
Mesodon clarki M: southwestern mountains	Dwarf Proud Globe	SC		S2	G? (G2)
Mesodon clarki nantahala M: Nantahala Gorge (endemic to this site)	Noonday Globe	T	T	S1	G? (G2T1)
Mesodon ferrissi M: Great Smoky Mountains and Plott Balsams (endemic to these ranges)	Smokey Mountain Covert	T		S2	G? (G2)
Mesodon jonesianus M: Newfound Gap area of Great Smoky Mountains National Park (endemic to this area)	Big-tooth Covert	T	3C	S2	G? (G2)
Mesodon orestes M: Plott Balsam mountains (endemic to this area)	Engraved Covert	T	C2	S2	G? (G2)
Mesodon subpalliatum M: central mountains (Avery to Haywood counties)	Velvet Covert	SC		S2	G? (G2)

Natural Heritage Program List of the Rare Animals of North Carolina

21

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
Mesodon wheatleyi clingmanicus M: Clingmans Dome region of Great Smoky Mountains National Park (endemic to this area)	Clingman Covert	T	C2	S1	G4 (G1)
Pallifera hemphilli M: high elevation forests, mainly spruce-fir	Black Mantleslug	SC		S2	G3
Paravitrea andrewsae M: northern half of the mountains	High Mountain Supercoil	SC		S2	G7 (G3)
Paravitrea clappi M: high elevations in Great Smoky Mountains National Park	Mirey Ridge Supercoil	SC	3C	S2	G7 (G3)
Paravitrea lacteodens M: Graham County, possibly Cherokee County (endemic to this area)	Ramp Cove Supercoil	SC		S1	G7 (G1Q)
Paravitrea lamellidens M: southern half of the mountains	Lamellate Supercoil	SC		S2	G7 (G3)
Paravitrea placentula M: Mitchell and Swain counties	Glossy Supercoil	SC		S2	G3
Paravitrea ternaria M: Madison County (endemic to this county and Unicoi County, Tennessee)	Sculpted Supercoil	T	C2	S2	G7 (G2)
Paravitrea umbilicaris M: extreme southwestern mountains	Open Supercoil	SC		S2	G7 (G3)
Paravitrea varidens M: Mitchell and Yancey counties (endemic to North Carolina and adjacent Tennessee)	Roan Supercoil	T	C2	S2	G7 (G2)
Stenotrema depilatum M: Great Smoky Mountains National Park (essentially endemic to this area)	Great Smoky Slitmouth	SC		S2	G7 (G2)
Triodopsis fulcidens P: southwestern Piedmont (endemic to North Carolina)	Dwarf Threetooth	SC		S2	G7 (G2)
Triodopsis soelneri C: swampy habitats in the extreme southeastern corner of the state (endemic to North Carolina)	Cape Fear Threetooth	T	C2	S2	G2
Ventridens coelaxis M: northern mountains	Bidentate Dome	SC		S2	G3
Zonitoides patuloides M: southwestern mountains	Appalachian Gloss	SC		S2	G7 (G2)

MOLLUSKS -- MARINE BIVALVES

Argopecten gibbus	Atlantic Calico Scallop	SR		S?	G?
Panopea bitruncata	Atlantic Geoduck	SR		S?	G3?
Paramya subovata	Subovate Softshell	SR		S?	G?

MOLLUSKS -- MARINE GASTROPODS

Busycon canaliculatus	Channeled Whelk	SR		S?	G?
Busycon carica	Knobbed Whelk	SR		S?	G?
Busycon contrarium	Lightning Whelk	SR		S?	G?
Detracia clarki	Clark's Melampus	SR		S?	G?
Neritina usnea	Olive Nerite	SR		S?	G?

Scientific Name	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global

Province: Habitat

ARACHNIDS¹²

Ivesia carolinensis (see Nesticus)

Microhexura montivaga	Spruce-fir Moss Spider	SR	C1	S1	G1
M: in moss of spruce-fir forests (apparently endemic to North Carolina)					
Nesticus brimleyi	a nesticid spider	SR		S1?	G1?
M: caves (endemic to the vicinity of Bat Cave)					
Nesticus carolinensis	Linville Caverns Spider	SR		S1?	G1?
M: caves (apparently endemic to Linville Caverns)					
Nesticus cooperi	Lost Nantahala Cave Spider	SR	C2	S1?	G1?
M: caves and along Nantahala River (apparently endemic to Swain County, NC)					
Nesticus crosbyi	a nesticid spider	SR		S1?	G1?
M: spruce-fir forests (apparently endemic to Mount Mitchell)					
Nesticus mimus	a nesticid spider	SR		S2?	G2?
M: rocky areas; known from Grandfather Mountain and Table Rock; also in Virginia					
Nesticus sheari	a nesticid spider	SR		S2?	G2?
M: on ground in moist or rich forests (apparently endemic to Graham County, NC)					
Nesticus silvanus	a nesticid spider	SR		S2?	G2?
M: habitat not indicated (apparently endemic to southern mountains of North Carolina)					
Nesticus, new species? (sp. 1)	a nesticid spider	SR		S2?	G2?
M: habitat not indicated (known only from Jackson and Transylvania counties, NC, and Oconee County, SC)					
Vaejovis carolinianus	Carolina Scorpion	SR		S2?	G?
MP: under shelter of rocks, leaves, and buildings, along southern border of state					

CRUSTACEANS

Acanthocyclops carolinianus	Carolina Acanthocyclops	SR		S1?	G?
P: temporary ponds and pools near Chapel Hill					
Asctocythere cosmeta	Grayson Crayfish Ostracod	SR		S2?	G?
M: symbiotic on crayfish in sub-surface waters of burrows					
Attheyella obatogamensis	Obatogamau Attheyella	SR		S1?	G?
C: cool waters; in North Carolina only known from White Lake in Bladen County					
Caecidotea carolinensis	Bennett's Mill Cave Water Slater	SR		S1	G?
P: caves; in McDowell County					
Cambarus catagius	Greensboro Burrowing Crayfish	SR	C2	S1	G1
P: lawns in Greensboro (endemic to North Carolina)					
Cambarus georgiae	Little Tennessee Crayfish	SR	C2	S1?	G1
M: streams in Little Tennessee drainage					
Cambarus hiwasseeensis	Hiwassee Crayfish	W5	C2	S3?	G4G5
M: streams in Hiwassee drainage					
Cambarus parrishi	Parrish Crayfish	SR	C2	S1?	G1
M: streams in Hiwassee drainage					
Cambarus reburus	French Broad Crayfish	W3	C2	S2S3?	G2G3
M: streams in upper portions of French Broad drainage, and in one stream in Savannah drainage (endemic to North Carolina)					

¹² This arachnid list is a selective one, concentrating on cave and other montane spiders, and is not intended to be a complete list of the rare arachnids in the state.

Natural Heritage Program List of the Rare Animals of North Carolina

23

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Cymocythere clavata</i> M: symbiotic on crayfish in mountain streams and rivers	Oconee Crayfish Ostracod	SR		S2?	G?
<i>Dactylocythere isabelae</i> P: symbiotic on crayfish in Lyle Creek in Catawba drainage (endemic to North Carolina)	Catawba Crayfish Ostracod	SR	C2	S1?	G?
<i>Dactylocythere peedeensis</i> P: symbiotic on crayfish in Pee Dee drainage (endemic to North Carolina, but likely occurs in South Carolina)	Pee Dee Crayfish Ostracod	W3	C2	S2?	G?
<i>Dactylocythere prinsi</i> M: cold streams of Savannah drainage in Jackson County (endemic to North Carolina, but possible in adjacent South Carolina and Georgia)	Whitewater Crayfish Ostracod	SR		S1	G?
<i>Diacyclops jeanneli putei</i> P: dug well, in Orange County (endemic to North Carolina)	Carolina Well Diacyclops	SR		S1?	G?
<i>Lynceus gracilicornis</i> C: temporary ponds, pools, and ditches	Graceful Clam Shrimp	SR		S2?	G?
<i>Orconectes virginianensis</i> C: streams and rivers in the Chowan and Roanoke drainages	Chowanoke Crayfish	SR	C2	S2?	G2
<i>Procambarus leptodactylus</i> C: streams and canals in Waccamaw drainage	Pee Dee Lotic Crayfish	SR	C2	S2?	G2G3
<i>Procambarus medialis</i> C: sluggish streams and ditches in Tar and Neuse drainages (endemic to North Carolina)	Tar River Crayfish	W3	C2	S2?	G2
<i>Procambarus plumimanus</i> C: rivers, ponds, ditches, and borrow pits in eastern Coastal Plain (endemic to North Carolina)	Croatan Crayfish	W2	C2	S2?	G2
<i>Skistodiaptomus carolinensis</i> M: Lake Ravenel in Macon County (endemic to North Carolina)	Carolina Skistodiaptomus	SR		S1?	G?
<i>Stygobromus carolinensis</i> M: seeps at Mount Mitchell (endemic to North Carolina)	Yancey Sideswimmer	SR		S1	G?
<i>Waltoncythere acuta</i> M: symbiotic on crayfish in high gradient rivers and streams in Transylvania County (endemic to North Carolina, but likely occurs in SC)	Transylvania Crayfish Ostracod	SR		S2?	G?

MILLIPEDES

<i>Boraria deturkiana</i>	a millipede	SR		S?	G?
<i>Brachoria eutypa</i>	a millipede	SR		S?	G?
<i>Cleidogono tallapoosa</i>	a millipede	SR		S?	G?
<i>Croatania catawba</i>	a millipede	SR		S?	G?
<i>Deltotaria lea</i>	a millipede	SR		S?	G?
<i>Dixioria dactylifera</i>	a millipede	SR		S?	G?
<i>Dynoria icana</i>	a millipede	SR		S?	G?
<i>Erdelyia saucra</i>	a millipede	SR		S?	G?
<i>Pachydesmus crassicutus incursus</i>	a millipede	SR		S?	G?
<i>Scoterpes</i> sp.	a millipede	SR		S?	G?

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name	Common Name	Status		Rank	
Province: Habitat		N.C.	U.S.	N.C.	Global
INSECTS -- MAYFLIES					
Dolania americana	American Sand Burrowing Mayfly	SR	C2	S1?	G?
Ephemerella argo	Argo Ephemerellan Mayfly	SR	C2	S1	G1G3
Serratella spiculosa	Spiculose Ceratellan Mayfly	SR	C2*	SH	GH
INSECTS -- CADDISFLIES					
Agapetus jocassee	a caddisfly	SR	C2	S?	G?
Ceraclea sp.	a caddisfly	SR	C2	S?	G?
Helicopsyche paralimnella	a caddisfly	SR	C2	S?	G?
Hydroptila englishi	a caddisfly	SR	C2	S?	G?
INSECTS -- DRAGONFLIES					
Calopteryx amata no location data	Superb Jewelwing [damselfly]	SR		SU	G3G4
Cordulegaster fasciata MP:	Banded Spiketail	SR		SU	G3Q
Enallagma minusculum no location data	Little Bluet [damselfly]	SR		SU	G3G4
Epiheca spinosa P:	Robust Baskettail	SR		SU	G3G4
Gomphus abbreviatus no location data	Spine-crowned Clubtail	SR		SU	G3G4
Gomphus cavillaris brimleyi C:	Brimley's Clubtail	SR		S1S3	G4T3
Gomphus consanguis M:	Cherokee Clubtail	SR	C2	S1	G2G3
Gomphus diminutus C: Sandhills region, only from Moore County in NC	Diminutive Clubtail	SR		S1?	G3
Gomphus septima P: along the Haw, Rocky, and Deep rivers in the Cape Fear system (Triassic Basin fall line)	Septima's Clubtail	SR	C2	S1	G2
Gomphus parvidens MPC:	Piedmont Clubtail	SR		SU	G4
Gomphus parvidens carolinus C: Sandhills region	Sandhills Clubtail	SR	C2	S1?	G4T?Q
Gomphus ventricosus no location data	Skillet Clubtail	SR		SU	G3G4
Gomphus viridifrons no location data	Green-faced Clubtail	SR		SU	G3
Lanthus parvulus M:	Zorro Clubtail	SR		SU	G3G4
Leucorrhinia frigida C: Sandhills region	Frosted Whiteface	SR		S1	G5
Macromia margarita M: rivers and streams	Margaret's River Cruiser	SR	C2	S1	G2G3
Neurocordulia molesta no location data	Smoky Shadowfly	SR		SU	G3
Ophiogomphus aspersus no location data	Brook Snaketail	SR		SU	G3G4
Ophiogomphus edmundo M: no current locations in range (apparently endemic to North Carolina)	Edmund's Snaketail	SR	C2*	SH	GH
Ophiogomphus howei M: New River	Pygmy Snaketail	SR	C2	S1?	G2G3
Ophiogomphus incurvatus P:	Alleghany Snaketail	SR		SU	G3G4

Natural Heritage Program List of the Rare Animals of North Carolina

25

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
Ophiogomphus incurvatus incurvatus P:	Alleghany Snaketail	SR		S2S3	G3G4T3
Ophiogomphus mainensis P:	Twin-horned Snaketail	SR		SU	G3G4
Progomphus bellei C: sandy-bottomed lakes; White Lake	Belle's Sanddragon	SR	C2	S1	G3
Somatochlora georgiana PC:	Coppery Emerald	SR		SU	G3G4
Stylurus amnicola C:	Riverine Clubtail	SR		SU	G3G4
Stylurus laurae M:	Laura's Clubtail	SR		SU	G3G4
Stylurus notatus P:	Elusive Clubtail	SR		SU	G3G4
Stylurus scudleri M:	Zebra Clubtail	SR		SU	G3G4
Stylurus townesi C: only NC record from Columbus County	Townes' Clubtail	SR	C2	S1?	G3
Tachopteryx thoreyi PM: seeps and pools in forests	Gray Petaltail (Thorey's Grayback)	SR		S3?	G4

INSECTS -- FLIES

Eulonchus marialiciae M: (endemic to North Carolina)	Mary Alice's Small-headed Fly	SR	C2	S1S3	G1G3
---	-------------------------------	----	----	------	------

INSECTS -- SCORPIONFLIES

Brachypanorpa carolinensis M: moist, shady woods	Short-nosed Scorpionfly	SR		S2?	G?
Meropse tuber MP: woods, often near streams	Earwig Scorpionfly	SR		S2?	G3G5

INSECTS -- MOTHS

Acronicta albarufa no location data	Barrens Daggermoth	SR	C2	SH	G3G4
Acronicta sinscripta no location data	a dagger moth	SR		S1S3	G?
Agrotis buchholzi C: savannas	Buchholz's Dart Moth	SR		S1S3	G2G3
Catocala dulciosa no location data	Quiet Underwing	SR		SU	G2G4
Catocala marmorata no location data	Marbled Underwing	SR	3C	SU	G4
Catocala messalina no location data	Messalina Underwing	SR		S1S3	G4
Catocala pretiosa texarkana no location data	Texarkana Underwing	SR	C2	S?	G?
Euagrotis lubricans no location data	Slippery Dart	SR		SU	G5
Euchlaena milnei no location data	a looper moth	SR		SH	GU
Helimata infulata no location data	Rare Spring Moth	SR		SU	G?
Hemipachnobia subporphyrea subporphyrea C:	Sundew Cutworm Moth	SR		S1S3	G4TU
Hepialus sciophanes M: spruce-fir forests (known only from North Carolina)	a ghost moth	SR		SH	GH
Lithophane lemmeri CP:	Lemmer's Noctuid Moth	SR	3C	S1S3	G3G4
Meropseon cinnamicolor no location data	a moth	SR		SU	GU

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Metalepsis fishii</i> no location data	a noctuid moth	SR		SU	G4G5
<i>Metarranthis lateritiaria</i> no location data	a geometrid moth	SR		S1S3	G3G4
<i>Papaipema</i> , new species? no location data	Southeastern Cane Borer	SR		SU	G4?
<i>Phragmitiphila interrogans</i> no location data	a noctuid moth	SR		SU	GU
<i>Pyreferra ceromatica</i> no location data	Anointed Sallow Moth	SR		SU	GU
<i>Semiothisa fraserata</i> M: Fraser fir forests	Fraser Fir Angle	SR		S1S3	G1G3
<i>Spartiniphaga carterae</i> C: wet savannas; host plant -- <u>Calamovilfa</u> , perhaps other grasses	Carter's Noctuid Moth	SR	C2	S2S3	G2

INSECTS -- BUTTERFLIES

<i>Amblyscirtes alternata</i> C: open pine woods, savannas; host plants -- unknown, but presumably grasses	Least Florida Skipper	SR		S2?	G3G4
<i>Amblyscirtes reversa</i> CP: swamps, wet woods, or pocosin borders, near cane; host plant -- cane (<u>Arundinaria</u>)	Reversed Roadside Skipper	SR		S3?	G4
<i>Atrytone arogos arogos</i> C: savannas, open pinewoods, and other relatively undisturbed grasslands; host plants -- grasses, mainly broomsedge (<u>Andropogon</u>)	Arogos Skipper	SR	C2	S1	G4T3
<i>Atrytonopsis loammi</i> CT: grassy areas; host plants -- presumed to be <u>Andropogon</u> grasses	Loammi Skipper	SR		S1	GUQ
<i>Autochton cellus</i> MPC: moist woods near streams or ponds; host plants -- legumes, mainly hog peanut (<u>Amphicarpa</u>)	Golded-banded Skipper	SR		S2?	G4
<i>Calephelis virginienensis</i> C: savannas, flatwoods, other open pinewoods; host plant -- thistle (<u>Cirsium horridulum</u>)	Little Metalmark	SR		S3?	G4
<i>Celastrina ebenina</i> M: rich, moist deciduous forests; host plant -- goat's-beard (<u>Aruncus dioicus</u>)	Dusky Azure	SR		S1?	G4
<i>Celastrina neglectamajor</i> M: rich deciduous forests; host plant -- maple-leaf viburnum (<u>Viburnum acerifolium</u>)	Appalachian Blue	SR		S1?	G4
<i>Enodia anthonon</i> M: moist deciduous woods, especially near streams; host plants -- grasses	Northern Pearly Eye	SR		S1S2	G5
<i>Erora laeta</i> M: deciduous forests, especially along roads or edges at high elevations; host plants -- mainly beech (<u>Fagus</u>) and hazelnut (<u>Corylus</u>)	Early Hairstreak	SR		S2?	G4
<i>Erynnis martialis</i> MPC: upland woods, brushy fields; host plant -- New Jersey tea (<u>Ceanothus americanus</u>)	Mottled Dusky Wing	SR		S3?	G4
<i>Euphydryas phaeton</i> M: bogs, marshes, wet meadows; host plants -- varied, but mainly turtlehead (<u>Chelone</u>)	Baltimore	SR		S2S3	G4
<i>Euphyes berryi</i> C: wet areas near ponds, canals, or marshes; host plant -- not known; adults feed on pickerelweed (<u>Pontederia</u>)	Berry's Skipper	SR		S1	G3G4
<i>Euphyes bimacula</i> C: marshes, sedgy areas near wet woods; host plants -- sedges (<u>Carex</u>)	Two-spotted Skipper	SR		S2?	G4
<i>Euphyes dion</i> C: marshes, ditches, wet savannas, boggy areas;	Dion Skipper	SR		S3	G4

Scientific Name	Common Name	Status	Rank
Province: Habitat		N.C. U.S.	N.C. Global
host plants -- sedges (<u>Carex</u> , <u>Scirpus</u>)			
Euphyes dukesii	Duke's Skipper	SR	S1? G3G4
C: swamps (often near tupelo), marshes; host plants -- sedges (<u>Carex</u>)			
Fixsenia favonius	Southern Hairstreak	SR	S1 G4Q
T: maritime forests; host plant -- oaks, especially live oak (<u>Quercus virginiana</u>)			
Fixsenia ontario	Northern Hairstreak	SR	S3? G4
CT: oak-dominated woods, usually in dry sites; host plants -- oaks (<u>Quercus</u>)			
Glaucopsyche lygdamus	Silvery Blue	SR	S2S3 G5
M: open upland woods, roadbanks, and borders; host plants -- legumes, especially Carolina vetch (<u>Vicia caroliniana</u>)			
Hesperia attalus slossonae	Dotted Skipper	SR	S1S3 G4T3
C: pine/oak sandhills, flatwoods, savannas; host plants -- grasses			
Hesperia meskei	Meske's Skipper	SR	S1 G3?
C: open pine woods, especially in Sandhills; host plants -- grasses			
Hesperia metea	Cobweb Skipper	SR	S3? G4G5
PC: dry barren sites, such as pine/oak sandhills and upland woods; host plants -- mainly broomsedge (<u>Andropogon</u>)			
Hesperia sassacus	Indian Skipper	SR	S1? G5
M: old fields, clearings, wood margins, mainly at high elevations; host plants -- grasses			
Incisalia augustus	Brown Elfin	SR	S3? G5
MPC: dry acidic areas with an abundance of ericads, such as pine/oak heaths; host plants -- ericaceous shrubs			
Incisalia irus	Frosted Elfin	SR	S3? G4
MPC: open woods and borders, usually in dry situations; host plants -- lupines (<u>Lupinus</u>) and wild indigos (<u>Baptisia</u>)			
Lethe (see Enodia)			
Megathymus yuccae	Yucca Skipper	SR	S3? G4
C: dunes, flatwoods, old fields, and other places near yuccas; host plants -- <u>Yucca</u> species			
Mitoura hesseli	Hessel's Hairstreak	SR	3C S2? G3G4
C: Atlantic white cedar swamps; host plant -- white cedar (<u>Chamaecyparis thyoides</u>)			
Neonympha mitchellii francisci	Mitchell's Satyr	SR	C2 S1 G2T1?
C: boggy areas, overgrown beaver ponds, and pocosin margins with sedges in sandhills; host plants -- sedges (taxon endemic to North Carolina)			
Oligoria maculata	Twin-spot Skipper	SR	S3? G5
CT: swamp edges, marshes, ditches, and savannas; host plants -- probably grasses			
Papilio crespontes	Giant Swallowtail	SR	S2 G5
TCPM: primarily coastal in maritime forests or thickets; host plants -- prickly ash (<u>Zanthoxylum</u>), hoptree (<u>Ptelea</u>)			
Phyciodes batesii	Tawny Crescent	SR	C2 S1 G3G4
M: dry hillsides, upland pastures, at higher elevations; host plants -- asters, mainly <u>Aster undulatus</u>			
Phyciodes pascoensis	Northern Pearl Crescent	SR	SU G5
M: rocky areas (in Appalachians), but habitat poorly known; host plants -- asters			
Phyciodes phaon	Phaon Crescent	SR	S2? G5
CT: open, often dry areas, mainly on barrier islands; host plants -- fogfruit (<u>Lippia</u>)			
Poanes aaroni howardi	Aaron's Skipper	SR	S1S2 G4T4
T: salt or brackish marshes; host plants -- grasses.			

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
perhaps mainly <u>Spartina alterniflora</u>					
<i>Polites mystic</i> P: wet meadows, marshes; host plants -- grasses	Long Dash	SR		SR	G5
<i>Polygonia faunus</i> M: spruce, fir, or hemlock forests, where mixed with hardwoods; host plants -- varied, but mainly birches, willows, and alders	Green Comma	SR		S3?	G5
<i>Polygonia progne</i> M: rich deciduous forests; host plants -- mainly gooseberries (<u>Ribes</u>), but also on wild azalea (<u>Rhododendron nudiflorum</u>)	Gray Comma	SR		S1?	G5
<i>Pontia protodice</i> MPC: fields, brushy areas, wooded borders; host plants -- mustard species (Family <u>Brassicaceae</u>)	Checkered White	SR		S2S3	G5
<i>Problema bulenta</i> T: fresh to brackish marshes with tall grasses; host plant -- southern wild rice (<u>Zizaniopsis miliacea</u>), probably other tall grasses	Rare Skipper	SR	C2	S1?	G2G3
<i>Problema byssus</i> C: savannas, marshes, and other high-quality grassy areas; host plants -- grasses	Byssus Skipper	SR		S2?	G3G4
<i>Pyrgus wyandot</i> M: openings and edges in wooded hilltops; host plants -- Rosaceae, such as wild strawberry (<u>Fragaria</u>)	Southern Grizzled Skipper	SR	C2	SH	G3Q
<i>Satyrus caryaeorum</i> M: deciduous forests; host plants -- primarily hickories (<u>Carya</u>), but other trees also	Hickory Hairstreak	SR		S1?	G4
<i>Satyrus edwardsii</i> MPC: scrubby or xeric oak woods; host plants -- mainly oaks (<u>Quercus</u>)	Edwards' Hairstreak	SR		S2?	G4
<i>Satyrus kingi</i> MC: forests, often moist, usually near sweetleaf; host plant -- sweetleaf (<u>Symplocos</u>)	King's Hairstreak	SR		S3?	G3G4
<i>Speyeria diana</i> MP: rich woods and adjacent edges and openings, often near streams; believed extirpated from the lower Piedmont; host plants -- violets (<u>Viola</u>)	Diana	SR	C2	S3	G3
<i>Speyeria idalia</i> M: wet or dry meadows, bogs, open hilltops; host plants -- violets (<u>Viola</u>)	Regal Fritillary	SR	C2	SH	G3

Natural Heritage Program List of the Rare Animals of North Carolina

29

Scientific Name	Province: Habitat	Common Name	Status		Rank	
			N.C.	U.S.	N.C.	Global
INSECTS -- BEETLES						
Adelopsis mitchellensis		a small carrion beetle	SR		S?	G?
Agathidium sp 1		a round fungus beetle	SR		S?	G?
Aglenus brunneus		a cylindrical bark beetle	SR		S?	G?
Agonum gracilentum		a ground beetle	SR		S?	G?
Anillinus carolinae		a ground beetle	SR		S?	G?
Anillinus sp 2 [from NC, sp B]		a ground beetle	SR		S?	G?
Anillinus sp 4 [from NC, sp D]		a carabid beetle	SR		S?	G?
Anillinus sp A		a ground beetle	SR		S?	G?
Arianops alticola		a short-winged mold beetle	SR		S?	G?
Arianops barbata		a short-winged mold beetle	SR		S?	G?
Arianops coweeti		a short-winged mold beetle	SR		S?	G?
Arianops fovealis		a short-winged mold beetle	SR		S?	G?
Arianops gigantea		a short-winged mold beetle	SR		S?	G?
Arianops laminata		a short-winged mold beetle	SR		S?	G?
Arianops nantahalae joanna		a short-winged mold beetle	SR		S?	G?
Arianops nantahalae nantahalae		a short-winged mold beetle	SR		S?	G?
Arianops nodosa		a short-winged mold beetle	SR		S?	G?
Arianops norithe		a short-winged mold beetle	SR		S?	G?
Arianops parki		a short-winged mold beetle	SR		S?	G?
Arianops plectrops		a short-winged mold beetle	SR		S?	G?
Arianops spinicollis		a short-winged mold beetle	SR		S?	G?
Arianops teyahalee		a short-winged mold beetle	SR		S?	G?
Arianops thornei		a short-winged mold beetle	SR		S?	G?
Arianops unicoi		a short-winged mold beetle	SR		S?	G?
Cicindela abdominalis		a tiger beetle	SR		SU	G5
Cicindela dorsalis		a tiger beetle	SR		SU	G4
Cicindela lepida		Little White Tiger Beetle	SR		S1?	G4
Cicindela patruela		a tiger beetle	SR		S2?	G3
Ctenisius sp A		a short-winged mold beetle	SR		S?	G?
Hetaerius sp A		Hister Beetle	SR		S?	G?
Lathrobium shermani		a rove beetle	SR		S?	G?
Lichnanthe vulpina		a scarab beetle	SR		S?	G?

Natural Heritage Program List of the Rare Animals of North Carolina

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Limulodes paradoxus</i>	Horse-shoe Crab Beetle	SR		S?	G?
<i>Lordithon niger</i>	Black Lordithon Rove Beetle	SR	C2	S?	G?
<i>Maronetus</i> sp A	a carabid beetle	SR		S?	G?
<i>Maronetus tenuis</i>	a ground beetle	SR		S?	G?
<i>Maronetus unistriatus</i>	a ground beetle	SR		S?	G?
<i>Mayetia bulla</i>	a short-winged mold beetle	SR		S?	G?
<i>Mayetia pearsei</i>	a short-winged mold beetle	SR		S?	G?
<i>Mayetia</i> sp 2 [from NC, sp]	a short-winged mold beetle	SR		S?	G?
<i>Mayetia</i> sp 3 [from NC, sp]	a short-winged mold beetle	SR		S?	G?
<i>Mayetia</i> sp A	a short-winged mold beetle	SR		S?	G?
<i>Nebria appalachia</i>	a ground beetle	SR		S?	G?
<i>Microphorus americanus</i>	American Burying Beetle	SR	E	SH	G1
<i>Pilopius</i> sp A	a short-winged mold beetle	SR		S?	G?
<i>Psilocnemis leucosticta</i>	a scarab beetle	SR		S?	G?
<i>Pterostichus blanchardi</i>	a ground beetle	SR		S?	G?
<i>Pterostichus carolinus carolinus</i>	a ground beetle	SR		S?	G?
<i>Pterostichus carolinus fumorum</i>	a ground beetle	SR		S?	G?
<i>Pterostichus hypogaea</i>	a ground beetle	SR		S?	G?
<i>Pterostichus lubricus</i>	a ground beetle	SR		S?	G?
<i>Pterostichus mancus plethorus</i>	a ground beetle	SR		S?	G?
<i>Pterostichus palmi</i>	a ground beetle	SR		S?	G?
<i>Pterostichus primus</i>	a ground beetle	SR		S?	G?
<i>Pterostichus unicarum</i>	a ground beetle	SR		S?	G?
<i>Scaphinotus guyoti</i>	a ground beetle	SR		S?	G?
<i>Scaphinotus violaceus</i>	a ground beetle	SR		S?	G?
<i>Stenelmis gammoni</i>	Gammon's Stenelmis Riffle Beetle	SR	C2	S?	G1G3
<i>Trechus balsamensis</i>	a ground beetle	SR		S1?	G1?
<i>Trechus carolinae</i>	a ground beetle	SR		S1?	G1?
<i>Trechus luculentus luculentus</i>	a ground beetle	SR		S2?	G2T2?
<i>Trechus luculentus unicoi</i>	a ground beetle	SR		S2?	G2T2?
<i>Trechus mitchellensis</i>	a ground beetle	SR		S1?	G1?
<i>Trechus novaculosus</i>	a ground beetle	SR		S2?	G2?
<i>Trechus roanicus</i>	a ground beetle	SR		S1?	G1?
<i>Trechus rosenbergi</i>	a ground beetle	SR		S1?	G1?

Natural Heritage Program List of the Rare Animals of North Carolina

31

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
Trechus satanicus	a ground beetle	SR		S1?	G1?
Trechus subtilis	a ground beetle	SR		S1?	G1?
INSECTS -- ANTS					
Amblyopone trigonignatha	an ant	SR		S?	G?
Formica exsectoides	Alleghany Mound Ant	SR		S?	G?
ANNELIDS					
Chaetopterus variopedatus	Parchment Tube Worm	SR		S?	G?
Notomastus lobatus	a polychaete worm	SR		S?	G?
Thalassema hartmani	Hartman's Echiurid Worm	SR		S?	G?

**SUPPLEMENT TO THE
NATURAL HERITAGE PROGRAM LIST
OF THE RARE ANIMALS OF NORTH CAROLINA**

NORTH CAROLINA ANIMAL WATCH LIST

The North Carolina Animal Watch List includes animals that are rare or uncommon, are not well-studied, or are otherwise threatened with serious decline, but that have not yet been placed on the List of Rare Animals of North Carolina. Watch List species are additional indicators of significant habitats, and their presence should be considered in planning natural area protection efforts, though obviously with less weight than higher priority rare species and natural communities. The North Carolina Natural Heritage Program maintains paper files on these species, but does not include them in its map and computer files. Animals placed on this list fall into a number of categories, as discussed below. The North Carolina Natural Heritage Program requests additional information about these species in order to clarify their status and reclassify them into other appropriate and more specific categories.

Reasons for the current placement of species on the Watch List rather than at a higher rarity status (Endangered, Threatened, Special Concern, Significantly Rare, etc.) are varied. For many of them, the Natural Heritage Program lacks adequate documentation of their historic or present occurrence in North Carolina; this is especially true for invertebrates. Others are known to be rare or uncommon in North Carolina, but may or may not be declining. Some others may not be necessarily rare as yet, but they are undergoing significant losses of their habitat, such as animals of the spruce-fir forest, or are undergoing significant disturbances to their habitat, such as human disturbances to beach-nesting birds.

The following five Watch Categories have been devised to indicate the reasons for each species' current placement(s). These categories and the descriptions of them have been developed by the North Carolina Natural Heritage Program.

A number of species have been placed in two Watch Categories, because it is believed they may be "in trouble" for at least two reasons. For example, the Brown Creeper has a rather small breeding population in the state, in the higher elevations of the mountains, giving it a W2 status. However, as a portion of the breeding population occurs in the spruce-fir zone, which is undergoing degradation of the canopy, it is also given a W5 status, as well.

Watch Category 1 (W1) includes species that are known to be declining in North Carolina, for one reason or another. The distribution or population sizes of such species in the state are fairly well known; loss of habitat is not necessarily a factor. A large number of species are known to be declining in the state, such as Neotropical migrant birds, but the species in this category must have an N.C. Rank of S3 or higher (S2, S1, etc.). Examples: American Black Duck, Least Tern.

Watch Category 2 (W2) includes species that are rare to uncommon in North Carolina, but are not necessarily considered to be declining or otherwise "in trouble". Generally speaking, the distribution or population sizes of such species in the state are fairly well known. Examples: Northern Oriole, Coal Skink, Spotted Sunfish.

Watch Category 3 (W3) includes species that are poorly known in North Carolina, but are not necessarily considered to be declining or otherwise "in trouble". The distribution and population sizes of such species are not well known; this is especially true for a large number of invertebrates, as well as secretive or nocturnal vertebrates. Examples: Barn Owl, Southern Appalachian Salamander, *Leonardus Skipper*.

Watch Category 4 (W4) includes species reported from North Carolina without adequate documentation. These species should be listed at a higher level, if their reported occurrence in North Carolina is true. This category includes sight records of uncertain validity, old and vague reports for which no documentation has appeared,

and, in a few cases, more recent reports for which we have not yet received documentation. Examples: Porcupine, Snowshoe Hare, Gray Treefrog (Hyla versicolor).

Watch Category 5 (W5) includes species with increasing amounts of threats to its habitat, whether or not populations are known to be declining. These threats can include loss of habitat (e.g., the dramatic loss of maritime forests), degradation of habitat (e.g., pollution and sedimentation of rivers and streams), and disturbance to the habitat (e.g., humans and their vehicles on beaches), among other types of threats. Threats can also include use of pesticides, acid rain, fire suppression, over-collection by zoologists, and varied other factors. Examples: American Kestrel, Pygmy Salamander, Coachwhip.

North Carolina Animal Watch List
Common Name

35

Scientific Name	Province: Habitat	Status	Rank	
		N.C. U.S.	N.C.	Global

WATCH LIST CODES

- W1 = species known to be declining in the state; may need listing in upcoming years
W2 = species rare to uncommon, but probably not in trouble
W3 = species that is poorly known; perhaps needs listing in upcoming years
W4 = species reported from the state without adequate documentation
W5 = species with increasing amount of threats to its habitat, whether populations are known to be declining or not

MAMMALS

Erethizon dorsatum M: mixed conifer-hardwood forests	Porcupine	W4	SRSX	G5
Lasiurus seminolus CP: forages over open areas, often over water (summer)	Seminole Bat	W2,W3	S3B,S2N	G5
Lepus americanus M: spruce-fir and other high elevation forests	Snowshoe Hare	W4	SRSX	G5
Martes pennanti M: extensive spruce-fir or mixed spruce-fir-hardwood forests	Fisher	W4	SRSX	G5
Myotis lucifugus MPC: roosts in buildings (summer), in caves and mines (winter)	Little Brown Bat	W2,W3	S3	G5
Synaptomys cooperi MC: bogs and wet meadows in mountains; early succession wet places in Coastal Plain	Southern Bog Lemming	W2,W5	S3	G5
Zapus hudsonius MP: open moist fields and brushy places, usually near water	Meadow Jumping Mouse	W2	S3	G5

BIRDS¹³

Anas discors TC: fresh to slightly brackish marshes, usually at impoundments	Blue-winged Teal	W2	S1B,S2N	G5
Anas rubripes TC: fresh or brackish marshes, often at impoundments	American Black Duck	W1	S3B,S4N	G4
Ardea herodias CP: swamps or wet woods, usually remote (nest site)	Great Blue Heron	W2	S3B,S5N	G5
Carduelis pinus M: spruce-fir forests	Pine Siskin	W3	SUB,S4N	G5
Certhia americana M: high elevation forests, favoring spruce-fir mixed with hardwoods	Brown Creeper	W2,W5	S3B,S5N	G5
Charadrius wilsonia T: beaches, island-end flats, estuarine islands	Wilson's Plover	W1,W5	S3B,S2N	G5
Empidonax minimus M: open hardwood forests, groves, streamside trees	Least Flycatcher	W2	S3B,S2N	G5
Empidonax traillii MP: wet thickets in open country, often along streams in broad valleys	Willow Flycatcher	W2	S3B,S2N	G5
Eudocimus albus T: forests or thickets on maritime islands	White Ibis	W2	S3B,S3N	G5
Falco sparverius MPC: open country; nests in cavities, even in buildings or poles in cities	American Kestrel	W1,W5	S3B,S5N	G5
Icterus galbula MP: hardwood groves or streamside trees, in open country	Northern Oriole	W2	S3B,S3N	G5
Ixobrychus exilis TCP: fresh or brackish marshes	Least Bittern	W3	S3B,S2N	G5

¹³ Only the breeding season populations are of concern; provinces and habitats are for these populations only

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
<i>Limnothlypis swainsonii</i> CMP: forests with dense understory, often with cane in Coastal Plain and rhododendron in mountains	Swainson's Warbler	W2,W5		S3B,S2N	G4
<i>Loxia curvirostra</i> M: coniferous forests, preferably spruce-fir	Red Crossbill	W2,W3		S3B,S3N	G5
<i>Myctanassa violacea</i> TCP: swamps; woods or thickets on maritime islands	Yellow-crowned Night-Heron	W2,W3		S3B,S2N	G5
<i>Poocetes gramineus</i> M: high elevation pastures and grassy fields	Vesper Sparrow	W1,W5		S3B,S2N	G5
<i>Sitta canadensis</i> M: high-elevation coniferous forests, preferably spruce-fir	Red-breasted Nuthatch	W2,W5		S3B,S4N	G5
<i>Sterna antillarum</i> T: beaches, sand flats, open dunes	Least Tern	W1,W5		S3B,S2N	G4
<i>Sterna forsteri</i> T: salt or brackish marshes, nesting on wrack material or matted grasses	Forster's Tern	W2		S3B,S5N	G5
<i>Sterna sandvicensis</i> T: sand flats on maritime islands	Sandwich Tern	W2,W5		S3B,S2N	G5
<i>Tachycineta bicolor</i> MC: cavities near ponds or other open water	Tree Swallow	W2		S2B,S5N	G5
<i>Tyto alba</i> MPCT: extensive open country, nesting in old buildings, silos, large tree cavities	Barn Owl	W2,W3		S3B,S3N	G5
<i>Vermivora chrysoptera</i> M: old fields and successional hardwoods	Golden-winged Warbler	W5		S3B,S2N	G4

REPTILES

<i>Apalone spinifera aspera</i> PC: large streams, ponds, and lakes with sandy bottoms	Gulf Coast Spiny Softshell	W2		S3	G5
<i>Deirochelys reticularia</i> C: quiet waters of ponds, ditches, and sluggish streams	Chicken Turtle	W2		S3	G5
<i>Eumeces anthracinus</i> M: rocky slopes, wooded hillsides, roadbanks	Coal Skink	W2		S3	G5
<i>Kinosternon baurii</i> C: various shallow wet places; ponds, pools, ditches; status poorly known in NC	Striped Mud Turtle	W3		SU	G5
<i>Masticophis flagellum</i> CTP: dry and sandy woods, mainly in pine/oak sandhills	Coachwhip	W2,W5		S3	G5
<i>Regina rigida</i> C: marshes, cypress ponds, other wetlands	Glossy Crayfish Snake	W2,W3		S3	G5
<i>Rhadinaea flavilata</i> C: pine flatwoods and other damp woodlands	Pine Woods Snake	W2		S3	G4
<i>Seminatrix pygaea</i> C: in lush vegetation of ponds, ditches, or sluggish streams	Black Swamp Snake	W2,W3		S3	G5

North Carolina Animal Watch List
Common Name

37

Scientific Name Province: Habitat	Status N.C. U.S.	Rank N.C. Global

AMPHIBIANS

<i>Ambystoma mabeei</i> C: savannas, wet woods, swamps	Mabee's Salamander	W2	S3	G4
<i>Desmognathus aeneus</i> M: seeps, springs, or streams in hardwood forests in extreme southwestern counties	Seepage Salamander	W3	S3	G4
<i>Desmognathus imitator</i> M: cool, moist high elevation hardwood or spruce-fir forests; nearly confined to Great Smoky Mountains National Park	Imitator Salamander	W2	S3	G3
<i>Desmognathus wrighti</i> M: spruce-fir and other high elevation forests	Pigmy Salamander	W5	S3	G4
<i>Hyla versicolor</i> M: deciduous or mixed forests, often near water; range uncertain in NC	Gray Treefrog	W3,W4	SU	G5
<i>Plethodon richmondi</i> M: moist, high-elevation forests, usually on slopes; northern mountains	Ravine Salamander	W2	S3	G5
<i>Plethodon teyahalee</i> M: moist forests, in southwestern counties	Southern Appalachian Salamander	W3	S3	G3

FRESHWATER FISHES

<i>Cyprinella labrosa</i> [formerly <i>Hybopsis labrosa</i>] P: Yadkin, Catawba, and Broad drainages	Thicklip Chub	W2	S3	G3
<i>Cyprinella spiloptera</i> [formerly <i>Notropis spilopterus</i>] M: primarily New and French Broad drainages	Spotfin Shiner	W2	S3	G5
<i>Elassoma evergladei</i> C: southern Coastal Plain, mainly Waccamaw drainage	Everglades Pygmy Sunfish	W2	S3	G5
<i>Erimystax insignis</i> [formerly <i>Hybopsis insignis</i>] M: primarily French Broad drainage	Blotched Chub	W2	S2	G4?
<i>Fundulus confluentus</i> T: fresh to brackish waters along coast	Marsh Killifish	W2	S2	G5?
<i>Fundulus luciae</i> TC: ponds and pools along coast	Spotfin Killifish	W2	S2	G4?
<i>Lepomis punctatus</i> C: most drainages in southern Coastal Plain	Spotted Sunfish	W2	S3	G5
<i>Moxostoma carinatum</i> M: French Broad, Little Tennessee, and Hiwassee drainages	River Redhorse (mountain form)	W2	S2	G4
<i>Nocomis platyrhynchus</i> M: New drainage	Bigmouth Chub	W2	S2	G4
<i>Notropis maculatus</i> C: southern Coastal Plain drainages	Taillight Shiner	W2	S2	G5
<i>Notropis scabriceps</i> M: New drainage	New River Shiner	W2	S3	G4
<i>Notropis volucellus</i> MPC: scattered drainages in mountains and near Fall Line	Mimic Shiner	W2,W3	S3	G5
<i>Percina gymnocephala</i> M: New drainage	Appalachia Darter	W2	S3	G3
<i>Phenacobius crassilabrum</i> M: Little Tennessee, French Broad, and Toe drainages	Fatlips Minnow	W2	S3	G3

North Carolina Animal Watch List

Scientific Name	Common Name	Status		Rank	
Province: Habitat		N.C.	U.S.	N.C.	Global
MOLLUSKS -- FRESHWATER BIVALVES					
Elliptio cistelliformis C: Neuse, Lumber, Pee Dee drainages; Lake Waccamaw	Box Spike	W3,W5		SU	G4Q
Elliptio congraea C: drainages north to the White Oak drainage	Carolina Slabshell	W2,W5		S3	G4
Elliptio producta C: Lake Waccamaw, and perhaps elsewhere; very difficult to identify	Atlantic Spike	W3,W5		SU	G4Q
Elliptio raveneli PC: most rivers in southern part of state; taxonomic problems	Carolina Spike	W3,W5		SU	G3Q
ARACHNIDS ¹⁴					
Hypochilus coylei M: caves (apparently endemic to southern mountains of North Carolina)	a lampshade spider	W3		S3?	G3?
Hypochilus sheari M: caves (apparently endemic to Buncombe, McDowell, and Yancey counties, NC)	a lampshade spider	W3		S2S3	G2G3
Nesticus bishopi M: on ground in forests (endemic to North Carolina)	a nesticid spider	W3		S3?	G3?
Nesticus gertschi M: caves; Bat Cave, NC, and in Tennessee	a nesticid spider	W4		S1?	G1?
Nesticus nasicus M: boulderfields and cove forests (apparently endemic to Jackson county, NC)	a nesticid spider	W3		S3?	G3?
Nesticus reclusus M: on ground in forests (apparently in Buncombe, McDowell, and Swain counties, NC, and in Tennessee)	a nesticid spider	W3		S3?	G3?
Nesticus, new species? (sp. 2) M: on ground in forests (only known from Clay County, NC)	a nesticid spider	W3		S1S3	G1G3
CRUSTACEANS					
Cambarus chasmodactylus M: rivers and large streams in New River drainage	New River Crayfish	W5	3C	S3?	G4G5
Cambarus hiwasseeensis M: streams in Hiwassee drainage	Hiwassee Crayfish	W5	C2	S3?	G4G5
Cambarus howardi M: no habitat or geographic information available	Chattahoochee Crayfish	W3		S1S3	G?
Cambarus reburus M: streams in upper portions of French Broad drainage, and in one stream in Savannah drainage (endemic to North Carolina)	French Broad Crayfish	W3	C2	S2S3?	G2G3
Canthocamptus vagus CP: in benthos of lakes and ponds within swampy environments	Swamp Canthocamptus	W2,W3		S3?	G?
Cytheridella ilosvayi C: quiet backwaters associated with large coastal rivers	Backwater Ostracod	W3		S2?	G?
Dactylocythere chelomata M: symbiotic on crayfish in streams and rivers in southwestern mountains	Cherokee Crayfish Ostracod	W2,W3		S2?	G?

¹⁴ This arachnid list is a selective one, concentrating on cave and other montane species, and is not intended to be a complete list of the "Watch List" arachnids in the state.

North Carolina Animal Watch List

39

Scientific Name Province: Habitat	Common Name	Status		Rank	
		N.C.	U.S.	N.C.	Global
Dactylocythere falcata M: symbiotic on crayfish in Hiwassee and Nolichucky drainages	Hiwassee Crayfish Ostracod	W2,W3		S2?	G?
Dactylocythere peedeensis P: symbiotic on crayfish in Pee Dee drainage (endemic to North Carolina, but likely occurs in South Carolina)	Pee Dee Crayfish Ostracod	W3	C2	S2?	G?
Harpagocythere baileyi M: symbiotic on crayfish in Little Tennessee and Savannah drainages (endemic to North Carolina, but likely occurs in SC and GA)	Highlands Crayfish Ostracod	W3		S2?	G?
Hesperodiaptomus augustaensis P: ephemeral ponds, such as floodplain pools; near Chapel Hill	Augusta Hesperodiaptomus	W3		SH	G?
Lordocythere petersi M: symbiotic on crayfish in the Hiwassee drainage (record based on a sketch only)	Cumberland Crayfish Ostracod	W4		SR	G?
Procambarus ancylus C: ditches, streams, and lakes in southeastern corner of the state	Edisto Crayfish	W2		S3?	G?
Procambarus medialis C: sluggish streams and ditches in Tar and Neuse drainages (endemic to North Carolina)	Tar River Crayfish	W3	C2	S2?	G2
Procambarus pearsei C: still-water habitats and burrows in Cape Fear and Pee Dee drainages	Sandhills Crayfish	W2		S3?	G4
Procambarus plumimanus C: rivers, ponds, ditches, and borrow pits in eastern Coastal Plain (endemic to North Carolina)	Croatan Crayfish	W2	C2	S2?	G2
Stygobromus sp. M: seep below Jones Knob (endemic to North Carolina)	Plott Balsam Sideswimmer	W3		S1?	G?

INSECTS -- BUTTERFLIES

Amblyscirtes hegon MP: openings and borders of rich woods; host plants -- grasses	Pepper and Salt Skipper	W2,W3		S3?	G5
Amblyscirtes vialis MPC: woods, wood margins; host plants -- grasses	Roadside Skipper	W2,W3		S3S4	G5
Asterocampa clyton PC: deciduous woods with hackberries; host plants -- hackberries (<u>Celtis</u>)	Tawny Emperor	W2,W3		S3S4	G5
Atrytonopsis hianna PC: grassy areas, often in dry open woods or old fields; host plants -- big bluestem and little bluestem (<u>Andropogon</u>)	Dusted Skipper	W2,W3		S3S4	G4
Erynnis baptisiae PC: dry open woods, dry fields and edges; host plants -- legumes, mainly wild indigo (<u>Baptisia tinctoria</u>)	Wild Indigo Dusky Wing	W3		S3S4	G5
Hesperia leonardus MP: wooded borders and openings, brushy fields; host plants -- grasses	Leonard's Skipper	W3		S3S4	G4
Pieris virginianensis M: rich deciduous woods or cove forests, often near streams; host plants -- toothworts (<u>Cardamine</u>)	West Virginia White	W3		S3S4	G4

North Carolina Animal Watch List
Common Name

Scientific Name

Status

Rank

Province: Habitat

N.C. U.S. N.C. Global

INSECTS -- BEETLES

<i>Cicindela ancocisconensis</i>	a tiger beetle	W		S3?	G3
<i>Cicindela dorsalis media</i>	a tiger beetle	W		SU	G4T4
<i>Cicindela splendida</i>	a tiger beetle	W		S3S4	G5

POTENTIAL NEW TO NORTH CAROLINA ANIMALS

The following list contains species not currently known to occur in North Carolina, or those species not currently known to breed in North Carolina, but which are considered to have some possibility of being found to occur on a regular basis or to breed in the state. The list is based on the species' currently known range and habitat preferences. Nearly all are species that occur in the adjacent states of South Carolina, Georgia, Tennessee, or Virginia, in habitats (or drainages) at least relatively similar to habitats known to exist in North Carolina. The purpose of this list is to encourage and challenge field workers to find new state occurrences and new breeding records. This list should give field investigators an idea of some of the species that may be regular components of North Carolina's fauna. (Species that might occur as single record accidentals, such as Western species of birds or Gulf Coast butterflies, are generally not included.) While some of these species may have relatively remote chances of being found in North Carolina, the likelihood of finding new state records is greatly increased by being aware of the possibilities and by species-directed searching. Our knowledge of many of our animal groups is still quite imperfect, especially invertebrate groups such as butterflies. Many natural areas are being destroyed before they can be investigated, and it can be assumed that a number of native species have been extirpated from North Carolina before they were ever documented as occurring in the state.

Following each species is the North Carolina province in which the species is considered most likely to be found occurring or found breeding. Where possible, a description of the typical habitat of the species in the vicinity of North Carolina is also given. Sometimes, the nearest known occurrence(s) to North Carolina are also listed, with the distance from North Carolina in number of counties in brackets. For instance, [1] indicates that the species has been reported from a county immediately adjacent to North Carolina; [5] indicates that the species has been reported from a county 5 counties away from the North Carolina border. An average county width in and around North Carolina is about 25 miles, so [5] indicates an approximate distance from North Carolina of 100-125 miles. It should be obvious that a species known to occur south only to the Virginia mountains would be best searched for in North Carolina counties near the Virginia line, such as Ashe, Alleghany, and Watauga. Likewise, Coastal Plain species occurring north to South Carolina are most likely searched for in counties along the southern border, such as Brunswick and Columbus.

The following additional symbols are used:

- * - May have occurred in North Carolina (no conclusive records) with the remote possibility of being conclusively found in the state
- + - Known to occur in the state on a regular basis (as an Element Occurrence) but not known conclusively to breed, though suspected or assumed to breed; conclusive breeding records lacking

MAMMALS

There are very few terrestrial mammals that could be discovered for the first time in North Carolina; three of them may have occurred in the mountains many decades or centuries ago, but reports are fuzzy or second-hand. Most of the potential new-to-North Carolina mammals are cetaceans. A few cetaceans probably occur regularly in the Atlantic off North Carolina, but far offshore; however, most of them are primarily either subtropical or Arctic inhabitants and would be considered accidental in the state.

Balaenoptera edeni -- Bryde's Whale

T: ocean, primarily in subtropical waters; VA (one record), GA

Balaenoptera musculus -- Blue Whale

T: ocean, entire north Atlantic, far offshore; MD (one record)

Erethizon dorsatum -- Porcupine *

M: forests; PA, and possibly now in MD; formerly in VA

Lagenorhynchus acutus -- Atlantic White-sided Dolphin

T: ocean, in cold waters north of NC; VA (three recent records)

Lasiurus intermedius -- Northern Yellow Bat

C: wooded areas near water; SC [2], VA [1]; the single record from VA indicates the species might be accidental there

Lepus americanus -- Snowshoe Hare *

M: high elevation forests and thickets, mainly in northern mts.; VA, MD -- perhaps extirpated in both states now

Martes pennanti -- Fisher *

M: high elevation, mixed forests; occurred formerly in VA, WV, but native populations apparently extirpated; recently re-introduced in WV and recently seen also in VA and MD, with the sightings likely from the re-introduced population

Peponocephala electra -- Melon-headed Whale

T: ocean, in subtropical waters; MD (one record)

Phoca groenlandica -- Harp Seal

T: ocean, in cold waters north of NC; VA (one record)

Stenella clymene -- Short-snouted Spinner Dolphin

T: ocean, in subtropical waters; FL, NJ

BIRDS

The species below are all considered to be potential breeders in North Carolina; some may possibly be breeding already. All have been recorded from the state on numerous occasions; those marked by (+) are known to occur in summer in the state to an extent and probably are nesting, but conclusive evidence is lacking.

- Accipiter gentilis* -- Northern Goshawk
M: extensive forests, mainly at high elevations; MD, WV, VA ?; a few summer records for the NC mountains
- Ammodramus caudatus* -- Sharp-tailed Sparrow
T: salt or brackish marshes; VA [3]; some references list NC in the breeding range -- this is erroneous; there have been a few summer reports, but some may be erroneous or of late migrating individuals
- Asio flammeus* -- Short-eared Owl
T: extensive brackish marshes; MD ?, VA formerly, and might still nest there; several summer records for the NC coastal marshes
- Asio otus* -- Long-eared Owl
M: conifers or mixed woods at high elevations in northern mountains; VA [2]; one or two summer reports from the NC mountains, but without visual confirmation
- Carpodacus purpureus* -- Purple Finch
M: spruce-fir forests; VA [1] (Mt. Rogers); one or two summer records for the NC mountains
- Catharus guttatus* -- Hermit Thrush +
[breeding evidence needed]; no active nest yet found, but probably nests [see main list]
- Catharus ustulatus* -- Swainson's Thrush
M: spruce-fir forests, mainly in northern mountains; VA [1] (Mt. Rogers); possibly nested in NC mountains in 19th Century, but no summer records in many decades
- Cistothorus platensis* -- Sedge Wren
T: brackish marshes; VA [3] (northern portion of Chesapeake Bay); several summer records from NC, mainly in brackish marshes, but these might be of wandering birds or migrants
- Contopus borealis* -- Olive-sided Flycatcher +
[breeding records for TN side of Great Smoky Mountains NP]; no active nest has been found in NC [see main list]
- Dendroica magnolia* -- Magnolia Warbler +
[breeding evidence needed]; no active nest yet found, but probably nests [see main list]
- Elanoides forficatus* -- American Swallow-tailed Kite
C: swamps, river bottoms; SC [2] (Santee River); numerous summer records, but all believed to be of visitors/postbreeders
- Empidonax flaviventris* -- Yellow-bellied Flycatcher
M: high elevation spruce-fir, usually where stunted or young; VA [1] (Mt. Rogers); two summer reports from NC mountains
- Ictinia mississippiensis* -- Mississippi Kite +
[breeding evidence needed]; no active nest yet found, but believed to nest along Roanoke River [see main list]
- Melospiza georgiana* -- Swamp Sparrow
M: bogs at high elevation; VA [5-6]; no summer reports for NC
- Mycteria americana* -- Wood Stork
C: swamps, with open water somewhat nearby; SC [4]; no reports from NC suggestive of breeding in the state [see main list]
- Oporornis philadelphia* -- Mourning Warbler
M: thickets, brushy places, clearings; VA [5]; a pair believed to have nested in mid-1980's near Great Smoky Mountains N.P. in NC is only summer record for the state
- Passerculus sandwichensis* -- Savannah Sparrow +
[breeding evidence needed]; VA [1]; believed to be nesting in Alleghany County, but only one other summer report for NC [see main list]
- Seiurus noveboracensis* -- Northern Waterthrush
M: bogs where spruce-fir is present; VA [5-6], plus two reports from Mt. Rogers; no summer reports for NC
- Vermivora pinus* -- Blue-winged Warbler +
[breeding evidence needed]; no active nest yet found, but presumed to breed in southwestern counties [see main list]
- Vermivora ruficapilla* -- Nashville Warbler
M: spruce-fir forests, mainly along margins or in young or stunted trees; VA [6], but also a report from Mt. Rogers; no summer reports for NC

REPTILES

- Graptemys geographica* -- Map Turtle
 M: large rivers in the Tennessee drainage; VA [2], TN [1]
Graptemys pseudogeographica -- False Map Turtle
 M: large rivers in the Tennessee drainage; TN [1-2]
Nerodia cyclopion -- Green Water Snake
 C: streams, lakes, ponds, marshes; SC [2]
Ophisaurus compressus -- Island Glass Lizard
 TC: maritime or other coastal forests, in dry habitats; SC [2]
Trionyx ferox -- Florida Softshell
 C: lakes, ponds, rivers; SC [3]
Trionyx muticus -- Smooth Softshell
 M: large rivers in the Tennessee drainage; TN [2?]

AMPHIBIANS

- Ambystoma cingulatum* -- Flatwoods Salamander
 C: flatwoods, bottomlands, swamps; SC [2-3]
Ambystoma jeffersonianum -- Jefferson Salamander
 M: low woods, bottomlands; VA [2]
Ambystoma texanum -- Smallmouth Salamander
 M: moist forests; TN [?]; ranges east to central TN
Eurycea lucifuga -- Cave Salamander
 M: limestone caves and ledges; TN [1], VA [2]
Gyrinophilus pallescens -- Tennessee Cave Salamander
 M: caves, presumably in limestone areas; TN [1-2]
Plethodon hoffmani -- Valley and Ridge Salamander
 M: montane forests; VA [3-4]
Plethodon hubrichti -- Peaks of Otter Salamander
 M: cool moist woods; VA [2]; endemic to Peaks of Otter Mountain
Plethodon websteri -- Webster's Salamander
 P: moist forests with steep north-facing slopes; SC [4]
Pseudobranchius striatus -- Dwarf Siren
 C: swamps, ponds, other sluggish freshwater habitats; SC [2-3]
Rana grylio -- Pig Frog
 C: lakes, ponds, marshes; SC [2]

FISHES

The absence in North Carolina of the very large number of Tennessee fishes occurring just over the state line is not an artifact of collecting intensity. Much sampling has occurred in the state near the Tennessee border for such species. The streams where they occur do extend into North Carolina; however, most of the streams where the fishes occur in Tennessee become high gradient near the border, with riffles and rapids preventing the fishes from occurring in North Carolina. A few reservoirs along the state line also block some species from entering the state. On the other hand, there are a number of species that occur within one or two counties of North Carolina that are not listed here; these are fishes in drainages that do not reach North Carolina, particularly the Chattahoochee and the Coosa in Georgia, the Clinch in Tennessee and Virginia, and the James in Virginia.

- Alosa chrysochloris* -- Skipjack Herring
 M: Tennessee drainages; TN [1]
Cottus baileyi -- Black Sculpin
 M: Tennessee drainages; TN [1], VA [1-2]
Etheostoma caeruleum -- Rainbow Darter
 M: Tennessee drainages; TN [1]
Etheostoma camurum -- Bluebreast Darter
 M: Tennessee drainages; TN [1]
Etheostoma cinereum -- Ashy Darter
 M: Tennessee drainages; TN [1-2]
Etheostoma hopkinsi -- Christmas Darter
 M: Savannah drainage; SC [1-2]
Etheostoma kennicotti -- Stripetail Darter
 M: Tennessee drainages; TN [1]
Etheostoma osburni -- Finescale Saddled Darter
 M: New drainage; VA [2]
Fundulus catenatus -- Northern Studfish
 M: Tennessee drainages; TN [1]

- Fundulus notatus* -- Blackstripe Topminnow
 M: Tennessee drainages; TN [1]
- Fundulus olivaceus* -- Blackspotted Topminnow
 M: Tennessee drainages; TN [1]
- Gasterosteus aculeatus* -- Threespine Stickleback
 T: tidal waters; VA [2?]
- Hemitremia flammea* -- Flame Chub
 M: Tennessee drainages; TN [1]
- Hybognathus nuchalis* -- Central Silvery Minnow
 M: Tennessee drainages; TN [2-3]
- Hybopsis aestivalis* -- Speckled Chub
 M: Tennessee drainages; TN [1-2]
- Hybopsis dissimilis* -- Streamline Chub
 M: Tennessee drainages; TN [1-2]
- Hybopsis storeriana* -- Silver Chub
 M: Tennessee drainages; TN [2-3]
- Hypentelium etowanum* -- Alabama Hog Sucker
 M: Tennessee drainages; TN [1], GA [1]
- Ichthyomyzon bdellium* -- Ohio Lamprey
 M: Tennessee drainages; TN [1]
- Ichthyomyzon castaneus* -- Chestnut Lamprey
 M: Tennessee drainages; TN [1]
- Ichthyomyzon gagei* -- Southern Brook Lamprey
 M: Tennessee drainages; TN [1-2]
- Ichthyomyzon greeleyi* -- Allegheny Brook Lamprey
 M: Tennessee drainages; TN [1]
- Ictalurus furcatus* -- Blue Catfish
 M: Tennessee drainages; TN [1]
- Labidesthes sicculus* -- Brook Silverside
 M: Tennessee drainages; TN [1-2]
- Lepisosteus oculatus* -- Spotted Gar
 M: Tennessee drainages; TN [1-2]
- Notropis ariommus* -- Popeye Shiner
 M: Tennessee drainages; TN [1-2]
- Notropis atherinoides* -- Emerald Shiner
 M: Tennessee drainages; TN [1]
- Notropis lirus* -- Mountain Shiner
 M: Tennessee drainages; TN [1]
- Notropis stramineus* -- Sand Shiner
 M: Tennessee drainages; TN [1]
- Noturus baileyi* -- Smoky Madtom
 M: Tennessee drainages; TN [1]; apparently endemic to Abrams Creek in Great Smoky Mountains N.P.
- Noturus leptacanthus* -- Speckled Madtom
 M: Savannah drainage; SC [1]
- Percina nigrofasciata* -- Blackbanded Darter
 M: Savannah drainage; SC [1]
- Percina rex* -- Roanoke Logperch
 P: Roanoke and Chowan drainages; VA [1-2]
- Percina shumardi* -- River Darter
 M: Tennessee drainages; TN [1-2]
- Phenacobius uranops* -- Stargazing Minnow
 M: Tennessee drainages; TN [1]
- Pimephales promelas* -- Fathead Minnow
 M: Tennessee drainages; TN [1], VA [1]
- Pimephales vigilax* -- Bullhead Minnow
 M: Tennessee drainages; TN [1-2]
- Scaphirhynchus platyrhynchus* -- Shovelnose Sturgeon
 M: Tennessee drainages; TN [1-2]

BUTTERFLIES

A species marked with the @ symbol is considered to be a Visitor, with breeding occurring elsewhere. Most of these breed to the south of North Carolina and would be expected to occur as a visitor in the warmer months. Otherwise, all other species on this list are presumed to breed in adjacent states.

There are numerous butterfly species whose presently known range extends south in the mountains only to Virginia. Some of these certainly must occur in the northern mountain counties of North Carolina, particularly those not restricted to habitats rare or absent in the state (e.g., shale barrens or limestone outcrops). North Carolina has apparently not had thorough statewide coverage of its Lepidopteran fauna, nor has a book or treatise been published on that fauna of the state. A 1989 unpublished distribution atlas of the Carolinas shows major gaps in county records in North Carolina for the common species, much less the uncommon ones. In summary, there is much to be learned about butterfly distribution in the state, including new species to be added to the state list.

Amblyscirtes belli -- Bell's Roadside Skipper

MP: wooded edges and openings, wooded creeks; host plant -- wild oats (*Uniola latifolia*); SC [1] (Oconee and Pickens counties)

Boloria selene -- Silver-bordered Fritillary

M: wet meadows, bogs, marshes; host plant -- violets (*Viola*) and other species; VA [2-3]

Brephidium isopthalma pseudofea -- Eastern Pygmy Blue

T: tidal flats and marshes; host plant -- glassworts (*Salicornia*), possibly saltwort (*Batis maritima*); SC [3]

Calephelis borealis -- Northern Metalmark

M: rocky areas near shale, serpentine, or limestone, usually near streams; host plant -- ragworts (*Senecio*), possibly fleabanes (*Erigeron*); VA [1-2]

Chlosyne gorgone -- Gorgone Checkerspot

MPC: open woods, edges, and clearings; host plant -- mostly composites, such as sunflowers (*Helianthus*); SC [1] (Oconee and Pickens counties), GA [1] (Rabun and Union counties)

Chlosyne harrisii -- Harris' Checkerspot

M: marshes, damp meadows, and other wet brushy places; host plant -- flat-topped white aster (*Aster umbellatus*); WV [6-7], one record for GA mountains

Colias interior -- Pink-edged Sulphur

M: high elevation areas with acidic soils, such as wood margins, openings, and heath balds; host plant -- blueberries (*Vaccinium*); VA [5?]

Erynnis lucilius -- Columbine Dusky Wing

M: rich, rocky woods, ravines, and wooded edges; host plant -- wild columbine (*Aquilegia canadensis*); VA [1?]

Erynnis persius -- Persius Dusky Wing

M: openings in cool forests, fields or bogs near woods; host plant -- mainly willows (*Salix*), poplars and aspens (*Populus*); VA [1]

Euchloe olympia -- Olympia Marble

M: dry or rocky forests, slopes; host plant -- cresses, primarily *Arabis*; TN [1?], VA [1-2]

Euphyes conspicua -- Black Dash

CM: marshes, wet meadows, but rarely in bogs; host plant -- sedges, mainly *Carex stricta*; VA [1], SC [3]

Incisalia polios -- Hoary Elfin

M: sunny, dry slopes and other barren or rocky habitats; host plant -- heaths, possibly trailing arbutus (*Epigaea repens*) in the Appalachians; VA [2?]

Leptotes cassius theonus -- Cassius Blue @

TC: mainly coastal towns, gardens, and residential areas; SC [3]

Megathymus cofaqui -- Cofaqui Skipper

MPC: wooded areas, dunes, and other places near yucca; host plant -- yuccas (*Yucca*); GA [1] (Rabun County)

Phyciodes texana seminole -- Texan Crescent

C: near banks of rivers and streams; host plant -- species in the Acanthus family (*Acanthaceae*) such as *Dicliptera*; SC [2]

Speyeria atlantis -- Atlantis Fritillary

M: cool, open woods, wooded streams, clearings; host plant -- violets (*Viola*); VA [4-5?]

Thymelicus lineola -- European Skipper

MP: grassy areas, pastures, and roadsides; host plant -- timothy (*Phleum pratense*) and other grasses; VA [1], SC [1] (Greenville County) (Introduced from Europe, presumed to occur in NC)

STATE LIBRARY OF NORTH CAROLINA



3 3091 00581 7523

